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Coastal City Adaptation Project (CCAP)

Social and Behavior Change Communications Strategy

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Acronyms

ANAMM	National Association of Municipalities of Mozambique (<i>Associação Nacional dos Municípios de Moçambique</i>)
CBO	Community-based organization
CCA	Climate change adaptation
CCAP	Coastal City Adaptation Project
CSO	Civil society organizations
CVM	Mozambique Red Cross (<i>Cruz Vermelha de Moçambique</i>)
DRR	Disaster risk reduction
EWS	Early warning system
GIS	Geographic information system
IEC	Information, education, and communication
INGC	National Disasters Management Institute (<i>Instituto Nacional de Gestão de Calamidades</i>)
IPC	Inter-personal communication
MITADER	Ministry of Land, Environment, and Rural Development (<i>Ministério da Terra, Ambiente e Desenvolvimento Rural</i>)
M&E	Monitoring and evaluation
NGO	Non-governmental organizations
SBCC	Social and Behavior Change Communications
SIGIC	Integrated Disaster Information Management System (<i>Sistema Integrado de Gestão de informação sobre Calamidades</i>)
SIGIU	Integrated Urban Information Management System (<i>Sistema Integrado de Gestão de informação Urbana</i>)
TOT	Training-of-trainers
UEM	Eduardo Mondlane University (<i>Universidade Eduardo Mondlane</i>)
UNESCO	United Nations Educational, Scientific and Cultural Organization
UniLúrio	Lúrio University (<i>Universidade Lúrio</i>)
USAID	United States Agency for International Development

Section 1: Executive Summary

The United States Agency for International Development's (USAID's) five-year Coastal City Adaptation Project (CCAP) has the overall goal of increasing climate resilience in selected Mozambican coastal cities. A wide array of evidence shows that proactive investments in adaptation can cost-effectively avert costs associated with climate change while yielding substantial co-benefits. To facilitate this process in vulnerable Mozambican coastal communities, CCAP has been working with the municipalities of Pemba and Quelimane, and now Nacala, to lay the groundwork for climate-smart initiatives and disaster response preparedness. Alongside the municipalities, CCAP has been working with local communities to increase understanding of urban adaptation issues and increase the application of management options for urban adaptation. CCAP also is engaging with academia and an array of civic organizations to increase climate awareness and the technical expertise of future urban planners and municipal authorities to facilitate local adaptive measures. CCAP has created frameworks for localized interventions that can be taken to scale in the final years of the project and beyond. The project also has built the foundation for resilience by bolstering green-infrastructure, developing and implementing an early warning system (EWS), and introducing municipal leadership to climate resilience planning and best practices. CCAP will continue implementing and expanding on these current activities throughout the life of the project.

During these next project years, CCAP will use a newly-developed Climate-Smart Cities branded social and behavior change communications (SBCC) platform, based on the Socio-Ecological Model for Change (described below, Section 3). This branded platform, which is based on CCAP's goal and objectives (Annex 1) and its causal model (Annex 2), seeks to improve the climate resiliency of individuals and communities, ultimately working to strengthen the role of the municipality and other stakeholders in climate change adaptation (CCA) and other services directly and indirectly linked.

The branded platform includes three main intervention areas to increase, encourage and sustain a change in climate resilient behaviors and practices: 1) Enabling environments, encompassing policies and advocacy, institutional development strengthening and creation, and sustained financing schemes; 2) Communication approaches to promote climate-smart behaviors and practices (e.g., IEC, SBCC, training, and mobilization); and, 3) Access to infrastructure, services, and systems. Through these interventions, the project will address the social norms, behaviors, and practices linked to climate-smart household infrastructures, sanitation practices, and green infrastructures and will target specific populations (defined below) through various communication channels such as the 3-2-1 service, radio messages, and community mobilization. In particular, these interventions will work to address seven macro-behaviors (presented below, Table 1) that encompass 13 feasible (micro) behaviors (described below, Table 3). To support these three interventions and the promotion of these behaviors, CCAP will leverage current activities and implement SBC activities as part of this branded SBCC platform.

The following SBCC Strategy includes several sections that will guide the development of the implementation plan for the Climate-Smart Cities branded SBCC platform: 1) A situational analysis that will provide current country context regarding CCA and rationale for a branded SBCC platform; 2) A strategic approach that describes the Climate-Smart Cities branded SBCC platform, including objectives, target audiences, behaviors, and interventions; 3) A creative brief that describes the communication context, key messages, communication

tools, materials, and other medium, communication channels and actions; 4) A management plan describing partnerships, materials production, and M&E; and, 5) A set of observations, recommendations, and conclusions. In addition to this Strategy, the implementation plan will be guided by findings from the Household Socio-Economic and Infrastructure Assessment (Annex 3), focus group discussions, and any other quantitative and qualitative data collected for this effort.

Section 2: Situational Analysis

A. National Context

Situated on the southeast coast of Africa, Mozambique is one of the poorest countries in the world. The country faces many challenges, such as widespread poverty, high prevalence of HIV/AIDS, major educational gaps, and low life expectancy rates. In addition to being one of the most vulnerable to the effects of climate change, annually facing high levels of variability and extreme events, such as cyclones, floods, tropical storms, and droughts, Mozambique struggles with secondary effects like erosion, famine, and water-borne diseases.¹ The country has already made some investments in preventing natural hazards and improving its EWSs. Additionally, adaptation measures are being implemented in the agriculture, fisheries, energy, environmental, and water sectors, with particular attention being paid to the coastal zones and erosion control.² However, the vulnerability of the country's coastal cities continues to be compounded by socio-economic conditions that limit the ability of municipal, provincial, and national government agencies to enhance their resiliency and adequately respond to extreme hydrometrics events.

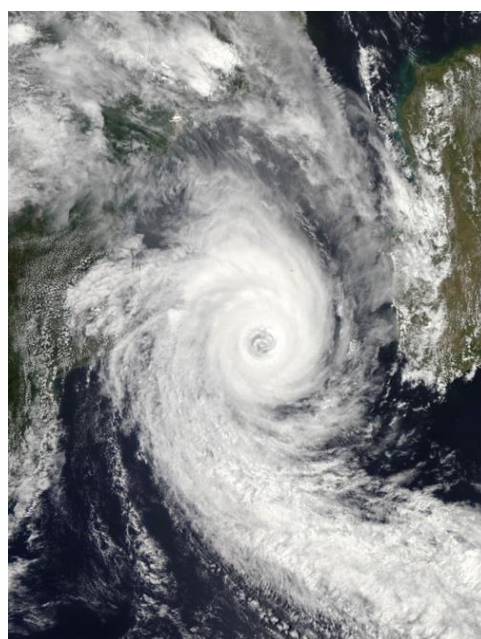


Figure 1. Tropical Cyclone Funso in the Mozambique Channel, 2012. Earth Observatory, NASA.

B. Pemba and Quelimane

Mozambique's coastal cities contain 60% of the population and serve as economic hubs and primary drivers of the country's development. They house much of the country's key infrastructure and productive workforce, which are vital to sustaining the strong economic growth levels Mozambique has witnessed over the past few years. These same cities are also the most vulnerable to rising sea levels, coastal erosion, and extreme climatic events.

The cities of Pemba and Quelimane illustrate the challenges faced by medium and small coastal cities across Mozambique. Although there are marked differences in their location, topography, spatial distribution of population, and socio-economic realities, these cities face similar challenges. They are vulnerable to extreme weather, contend with aging and inadequate infrastructure that is not sufficiently resilient, include numerous informal

¹ The World Bank, 2013: Mozambique Country Profile. The World Bank, Washington, DC, USA. Last visited on 05/01/15: <http://data.worldbank.org/country/mozambique>

² Ibid.

settlements located in highly vulnerable areas, and consist of populations that have little knowledge about the risks they face and how to deal with them. With limited resources, both cities are also working to respond effectively to climate change and to natural disasters.

C. Rationale for CCAP at the national and municipal levels

As mentioned above, the extreme climate events already impose large costs on Mozambican cities. Climate change will only continue to worsen the toll by causing sea levels to rise, inundating unprotected low-lying areas. Climate change is also likely to increase the frequency and severity of storms and cyclones, leading to floods that are more destructive. In turn, these recurring events will have serious impacts on urban infrastructure, livelihoods, the health of local populations, and coastal ecosystems.

Evidence shows that proactive investments in adaptation can significantly reduce the adverse economic impact of climate change. Investment in adaptation can also yield substantial co-benefits to a wide range of stakeholders.

To address proactively CCA in vulnerable Mozambican coastal communities, the USAID launched CCAP in 2013. This project provides coastal cities of Pemba and Quelimane with support and resources to strengthen their capacities to mitigate some of the negative impact of climate change already experienced. Through this support, these two municipalities are responding to major challenges by taking a stepwise approach to building their CCA planning capacity, engaging communities with concrete



Figure 2. Flood of 2014 in Pemba. CCAP.

demonstration projects, and working in conjunction with national agencies to improve their disaster response capabilities. More specifically, Pemba and Quelimane are adopting a variety of simple and cost-effective adaptation planning tools; designing, testing, and building climate-smart housing locally; investing in green infrastructure to provide natural protection to the city and, are piloting a real-time SMS-based early warning and data collection platform with active participation of local stakeholders. Under a Climate-Smart Cities branded umbrella, or platform, CCAP plans to leverage its current and future activities for a common goal - to improve the climate resiliency of individuals and communities and strengthen the role of the municipality and other stakeholders in CCA and other services.

D. Rationale for a branded SBCC platform to address climate-smart community and municipal management practices

Regularly, many Pemba and Quelimane households are negatively affected by floods, cyclones, tropical storms, erosion, famine, and water-borne diseases. Some of these challenges can be overcome through improved, climate-smart community and municipal management practices. What follows is a synopsis of areas in which a Climate-Smart Cities branded SBCC platform would be able to promote optimal practices.

Access to climate-smart household infrastructure

The availability of model homes adapted to climate change is a very new concept to Mozambique, including the municipalities of Pemba and Quelimane and their communities. The home models that are currently built in the cities' neighbourhoods cannot be considered resilient to climatic events or made from sustainable resources. Findings from the preliminary formative research studies in Quelimane and Pemba show that most household infrastructures, including latrines, are not made using techniques that ensure that homes can withstand extreme weather impacts and there lacks an understanding of the importance in using these techniques. As a result, most household infrastructures, including latrines, in communities such as Icídua and Paquitequete are vulnerable to flooding. Understanding the importance of building infrastructures that are able to withstand extreme weather would help mitigate hazards currently experienced by many households in these two cities.³

The municipalities and their communities also lack the awareness, knowledge, and understanding of the overall importance of being climate resilient. Any construction of climate-smart housing will require activities to increase the municipalities' understanding of CCA. This includes conducting a participatory housing assessment to determine the types of climate resilient homes and latrines that could be constructed based on the location of the neighborhoods. Based on the findings, model homes will be built, using sustainable resources, as examples for future constructions.

Sanitation practices

In Mozambican cities, the municipalities are usually responsible for sanitation-related services with the objective of ensuring a cleaner living environment for the residents and preventing spread of disease and improving overall health. Unfortunately, most municipalities in Mozambique, including Pemba and Quelimane, struggle with solid waste management as well as establishing an effective sanitation system that addresses the needs of its residents.

In both cities, most residents do not follow the proper procedures for disposing of waste from their homes. Additionally, like many other municipalities, Pemba and Quelimane are challenged with the management of the solid waste that is disposed, whether correctly or incorrectly. For example, in Quelimane, the city currently has no formal place for disposing of its trash, like a landfill, once it is picked up. With a weak solid waste management system, the municipalities also struggle with the enforcement of proper waste disposal. As a result, the city residents are not compelled to change their waste disposal practices. There is also no link established between the need to properly dispose of trash and becoming climate resilient and healthy. For example, the city residents do not understand that by properly throwing away trash, they are helping to reduce the pollution in their cities as well as helping to prevent the sewage systems from becoming backed-up, which can result in the flooding of their homes and streets during climatic situations. The municipalities also do not fully understand these linkages and therefore have not appropriately communicated the important link between proper trash disposal and good sanitation with being climate resilient.

The lack of linkages between proper personal sanitation and climate resiliency also exists. Residents do not understand the importance of having and using latrines – ideally constructed from sustainable materials – as an aspect of being climate resilient. Findings from the initial formative research survey for Pemba and Quelimane showed that 54% and 45% of residents,

³ UN-Habitat, 2015: Avaliação Rápida da Situação de Infra-estrutura Habitacional na Cidade de Pemba, No Contexto de Adaptação as Mudanças Climáticas: Relatório Final. UN-Habitat, Maputo, Mozambique.

respectively, do not have latrines. In many of the neighborhoods, open defecation into the ocean or river is still the common practice. Many community members still defecate near mangroves rather than in a latrine, which affects the care and the growth of green infrastructure that could protect them from floods and high waters. In order to address sanitation in each city, including how it relates to climate resiliency, the municipalities and their neighborhoods must understand the benefits of climate-smart sanitation services and systems, including enforcement.

Green infrastructure

Green infrastructure, such as mangroves, is important to the protection of the coastline against the advancing of seawater during high tide and against coastal water erosion. Unfortunately, due to human actions, such as open defecation, as noted above, and cutting of mangrove trees for firewood and the destruction of habitats for construction of homes, among others, the coastlines are lacking protection. In turn, erosion has become more prevalent and coastline-dependent economies, like fishing and shrimping, have become negatively impacted. The Lúrio University (*Universidade Lúrio- UniLúrio*) based in Pemba city, recently conducted a rapid assessment to determine the status of the mangroves in Quelimane. Findings from this study has shown that there are ways to reduce the negative impact of climate change and human actions on the coastlines, such as through habitat protection, sustainable use, and restoration.⁴ In order to implement these options, it is important to increase the awareness and knowledge of community members so that they perceive growth and protection of the green infrastructure as important to being climate resilient and economically sustainable.

Section 3: Strategic Approach

A. Introduction

An effective comprehensive SBCC approach to CCA and disaster risk reduction (DRR) should include: 1) an enabling environment that is driven by planning, institutional development, policy, and financing;⁵ 2) a branded Climate-Smart Cities SBCC platform that promotes climate-smart behaviors and practices; and, 3) an accessible set of climate-smart services and system based on demand from either institutions or individuals. Each of these tactics individually leads to positive impact in support of CCA and DRR. However, as part of a multifaceted approach, the three tactics can encourage changes in social norms and behaviors that increases climate resiliency in coastal cities (e.g., construction of climate-smart households, protection of green infrastructure, etc.). By integrating this SBCC approach into CCAP, we will leverage the successes and partnerships of the project to ensure long-term sustainable CCA and DRR behaviors and practices.

B. Overview and strategy

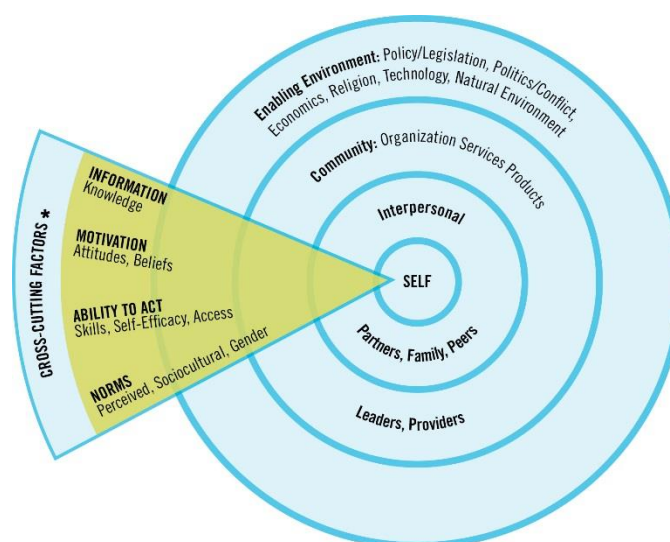
We have applied the Socio-Ecological Model for Change (Exhibit 1), which addresses the knowledge, skills, and motivation needed; desired modification for social norms; and, what

⁴ UniLúrio 2014: Avaliação Rápida do Estado do Ecossistema de Mangal no Bairro de Icídua, Quelimane: Possíveis Acções de Intervenção e Diagnóstico de Actores. UniLúrio, Maputo, Mozambique.

⁵ Although CCAP's work only focuses on three of the four points that drive an enabling environment (e.g., planning, institutional development, and financing), it believes that through its activities and collaboration with the municipalities, the project will be able to strengthen capacity sufficiently to ensure that policy change takes place through the leadership of the municipality leaders.

would constitute an enabling environment for change in order for municipalities and their communities to become climate resilient. Based on this model, we have created a branded platform for social and behavior change among institutions and individuals that addresses all layers of systems and society and aims to increase knowledge, adjust attitudes, improve skills, and change societal norms (when appropriate). As part of CCAP, the Climate-Smart Cities branded SBCC platform will foster support to the cities of Pemba and Quelimane so that they are knowledgeable and driven to offer climate-smart services and systems to their residents. The platform will also foster better-informed and motivated individuals, communities, and municipalities, who will move up the climate resilient ladder with improved behaviors and outcomes and generate demand for these climate-smart services and systems. We will take a comprehensive approach at both the system and individual level, working from both the top down and the bottom up – from system to individual and vice versa – to ensure a societal shift that elevates the importance of climate resiliency. Through our multilevel approach, we will reach target populations through a combination of context- and target-group specific channels (mass media, local groups, etc.). We will target primary and secondary audiences, described below, who play an important role in social mobilization and norms.

Exhibit 1. Socio-Ecological Model for Change



★ These concepts apply to all levels (people, organizations, and institutions). They were originally developed for the individual level.

Source: Adapted by FHIC-Change from McKee, Manoncourt, Chin and Carnegie (2000)

To ensure buy-in at all levels, we will leverage what has been done thus far by CCAP, as well as take into account existing strategies and policies, such as the National Climate Change Strategy 2012-2025, and municipal context based on our initial research. Additionally, we will work and coordinate with Pemba and Quelimane counterparts and leverage their leadership and relationships to roll out and implement the developed campaign, tools, and materials based on our branded SBCC platform. We will also leverage other CCAP capacity building activities, such as the development of the municipal adaptation plan, to facilitate an enabling environment and increase access to services and systems. In turn, this will foster an environment that supports increased access to quality services and systems. We will also work at the community and individual levels to promote optimal climate-smart behaviors among women, ultimately increasing demand for these services and systems.

C. Audience

Primary target audiences

Based on the findings from the situational analysis and the preliminary formative research, we identified potential target audiences (Table 1). We also identified subgroups of the target audiences. We based the segmentation of the target audiences on geographical, demographic, gender, and social-cultural differences. The project will use findings from the Household Socio-Economic and Infrastructure Assessment (Annex 3) and additional formative research activities to confirm and fine-tune the identified set of target audiences. We also prioritized the targeted audiences. It is expected that as the project expands and scales up its activities,

the other audiences will be targeted alongside the prioritized ones. For each behavior change component, we also identified the key primary audience as well as their influencers.

Table 1. Primary target audience by component and behavior

Component	Behavior (macro)	Primary target
Climate-smart household infrastructure	Constructing, maintaining, and using climate resilient household infrastructure in areas properly zoned for living, ideally with sustainable materials and address potential flooding	<ul style="list-style-type: none"> • Homeowners (men and women)
	Constructing, maintaining, and using climate-smart latrines	<ul style="list-style-type: none"> • Homeowners (men and women) and their children
	Constructing, maintaining, and using water catchment systems	<ul style="list-style-type: none"> • Homeowners (men and women)
Sanitation	Safe disposing of household and other solid waste	<ul style="list-style-type: none"> • Homeowners (men and women) and their children • Community members
Green infrastructure (currently for Quelimane only)	Protecting and maintaining green infrastructure for coastal protection and to decrease pollution in the water	<ul style="list-style-type: none"> • Homeowners (men and women) and their children • Community members and leaders • Fishers
	Realizing the potential economic benefits to drive the protection of green infrastructure	<ul style="list-style-type: none"> • Homeowners (men and women) and their children • Community members and leaders • Fishers • Beekeepers

Secondary target audiences – the Influencers

We also identified secondary target audiences. The secondary target audiences are people who can influence the primary audiences' decisions, including whether to initiate and continue to practice optimal behaviors. Through them, CCAP will be able to influence the primary audiences' knowledge, awareness, attitude, and beliefs that affect their decision to change behaviors. The ultimate goal is to target the secondary audiences with messages to help them influence the primary audiences in favor of the optimal sets of behaviors. Based on their degree of influence, the following secondary audiences were identified (Table 2).

Table 2. Secondary target audiences

Influencing audience	Primary audience to influence	Estimated power of influence*	Attitude toward behavior change of primary audience	Means of influence/ channels	From where does this audience obtain information
Parents (adults)	<ul style="list-style-type: none"> Children (0- to 17-years-old) Youth (17- to 29-years-old) 	Strong	Lack of awareness of CCA and DRR.	<ul style="list-style-type: none"> Mass media† Community mobilization 	<ul style="list-style-type: none"> Social network 3-2-1 service Radio, television (TV) (e.g., spots, “debates” and lectures about CCA)
Teachers and other school staff	<ul style="list-style-type: none"> Children (0- to 17-years-old) Youth (17- to 29-years-old) 	Strong	Lack of awareness of CCA and DRR.	<ul style="list-style-type: none"> Curriculum, classwork Extracurricular activities, like a school-based climate smart clubs 	<ul style="list-style-type: none"> Education (District Directorate for Education) Education (municipality) School curriculum
Municipal leaders	<ul style="list-style-type: none"> Homeowners (men and women) Community leaders Fishers and beekeepers 	Strong/ Moderate	<ul style="list-style-type: none"> Limited knowledge and awareness of CCA and DRR Accept the benefits of CCA and DRR but need reassurance on its effectiveness. 	<ul style="list-style-type: none"> Mass media† Trainings, workshops/seminars, and meetings Training-of-trainers (TOTs) Information and Experience Exchanges Conferences 	<ul style="list-style-type: none"> CCAP Team’s and partners’ activities 3-2-1 service Integrated Urban Information Management System (<i>Sistema Integrado de Gestão de informação Urbana, SIGIU</i>) Integrated Disaster Information Management System (<i>Sistema Integrado de Gestão de informação sobre Calamidades, SIGIC</i>) INGC UEM-led DRR and CCA Training
Community leaders	<ul style="list-style-type: none"> Homeowners (men and women) Community members Fishers and beekeepers 	Strong	Lack of awareness of CCA and DRR.	<ul style="list-style-type: none"> Mass media† Information, education, and communication (IEC) messages and materials about of climate adaptation and inter-personal communication (IPC) messages and materials‡ Community mobilization (theatre/drama, demonstrations, 	<ul style="list-style-type: none"> CCAP Team’s and partners’ activities 3-2-1 service INGC SIGIU Urbanization (municipality) Planning and Development (municipality) Agriculture (municipality) Sanitation and Climate Change (municipality) UN Habitat (sample designs)

Influencing audience	Primary audience to influence	Estimated power of influence*	Attitude toward behavior change of primary audience	Means of influence/ channels	From where does this audience obtain information
				<ul style="list-style-type: none"> competitions, videos, music, etc.) Management Committee of Natural Resources 	<ul style="list-style-type: none"> Ministry of Land, Environment, and Rural Development (Ministério da Terra, Ambiente e Desenvolvimento Rural, MITADER) UEM-led DRR and CCA Training
Faith-based leaders	<ul style="list-style-type: none"> Homeowners (men and women) Community members 	Strong	Lack of awareness of CCA and DRR.	<ul style="list-style-type: none"> Sermons Seminars Religious group meetings IEC and IPC messages and materials‡ Community mobilization (theatre/drama, demonstrations, competitions, videos, music, etc.) 	<ul style="list-style-type: none"> CCAP Team's and partners' activities 3-2-1 service INGC Community leaders via community meetings UEM-led DRR and CCA Training
Civil society organizations (CSOs), community-based organizations (CBOs), non-governmental organizations (NGOs), etc.	<ul style="list-style-type: none"> Homeowners (men and women) Community members 	Strong	Accept the benefits of CCA and DRR but need reassurance on its effectiveness.	<ul style="list-style-type: none"> IEC and IPC messages and materials‡ Community mobilization "Debates", lectures, and meetings Mass media† 	<ul style="list-style-type: none"> INGC Urbanization (municipality) Planning and Development (municipality) Agriculture (municipality) Sanitation and Climate Change (municipality) UN Habitat (sample designs) MITADER UEM-led DRR and CCA Training

* Low, moderate, strong

† IEC messages and materials on resilient, climate smart houses and latrines; climate-smart sanitation; and, sustainable agriculture options for deforested areas of mangroves and other plants

‡ In partnership with the Communications Commission at the municipality level

D. Behaviors

We have identified key optimal behaviors as part of this multifaceted SBCC strategy. We will address specific behaviors related to climate-smart living at the individual, household, community, and municipal levels using tools that enable specific social and behavior change, rather than the prescriptive one-way messages. Need-based behavior change focuses on establishing dialogue and motivating change that can be easily assimilated within the socio-cultural environment of urban and peri-urban communities in Pemba and Quelimane.

Priority areas for focus are based on the situational analysis of the two cities, described in Section 2 above. Climate-smart interventions will focus on the promotion of seven macro-behaviors, which are presented in Table 1 above. These macro-behaviors encompass 13 feasible (micro) behaviors, which are described below in Table 3. These feasible behaviors were identified based on the formative research and on the core factors of the social cognitive theory, which is based on the concept of self-efficacy. These factors, below, have been proven to be effective in influencing behavior⁶:

1. Expected outcomes – The target audience believes that the benefits of performing the behavior exceed the disadvantages;
2. Intention – The target audience has committed to perform the behavior;
3. Skills – The target audience possesses the skills to perform the behavior;
4. Self-efficacy – The target audience has the conviction that they can effectively perform the behavior;
5. Emotion – The target audience believes that the behavior is most likely to produce an overall positive effect;
6. Self-standards – The target audience believes that performing this behavior is consistent with her/his self-image;
7. Perceived social norms – The target audience recognizes greater social pressure/acceptance to perform behavior than not to perform it; and,
8. Barriers – The target audience experiences fewer environmental obstacles to performing this behavior.

Additionally, based on our identified targeted audiences, we further identified behaviors that have a significant positive impact on the lives of the audiences, are easy to perform, are accessible (affordable and available), are non-time-consuming, are compatible with and similar to current behaviors, and are observable. The behaviors delineated below in Table 3 and the subsequent steps detailed are intended to integrate each of these factors and these audience perspectives. The project will use findings from the Household Socio-Economic and Infrastructure Assessment (Annex 2) and additional formative research activities to confirm and fine-tune these behaviors for the implementation plan.

Barriers and Motivations

We also conducted a barriers and motivation analysis as part of our formative research and situational analysis. As part of this analysis, we identified and grouped the barriers, as shown in Table 3. It must be noted that further investigation and validation through focus group discussions is needed and will be conducted based on findings from the Household Socio-Economic and Infrastructure Assessment (Annex 2).

⁶ Fishbein, et. al. 1993 “Eight Common Behavioral Factors.” These factors not only represent points of consensus among behavioralists, but have been empirically shown to account for most of the variations in any given behavior within any particular population.

Table 3: Detailed behavioral analysis of primary targets

Ideal Behavior	Current Reported and Observed Behaviors	Barriers to Ideal Behaviors	Facilitators to Motivators Ideal Behaviors	Feasible Behavior/Practice
Constructing, maintaining, and using climate resilient homes and latrines in areas properly zoned for living, ideally with sustainable materials and address potential flooding				
<ul style="list-style-type: none"> Construct a climate-smart home based on city regulations and guidelines. 	<ul style="list-style-type: none"> Many use materials that are not sustainable and not resilient to climate changes. Many live in extremely vulnerable areas that are prone to floods, landslides, erosion, droughts, etc. Many build latrines that are not climate-smart. Municipality does not enforce the limited city regulations and guidelines that currently exist. 	<ul style="list-style-type: none"> High cost of construction based on existing city regulations and guidelines. Lack of culture of climate resilient construction Lack of knowledge and awareness of climate resiliency, including home construction. Lack of knowledge and adherence to existing city regulations and guidelines due to the incessant search for space for housing. Low rigor in enforcement of city regulations and guidelines due to limited municipal resources and capacity. 	<ul style="list-style-type: none"> Understanding, application, and enforcement of city regulations and guidelines and construction standards through information dissemination (e.g., findings/data of construction vulnerability analysis). Understanding the importance of being climate resilient. Desire to care for and improve well-being of family. Prestige and social status. Local stakeholder buy-in of the benefits of climate-smart home construction. Creation of funds for construction of climate-smart homes available to community members through an application process. Availability of model climate-smart homes that are available throughout the target communities and can inspire people to build similar homes. 	<ul style="list-style-type: none"> Build a climate-smart home that is secure and in a properly zone location, using sustainable and climate resilient materials and design. City and community oversight of construction of climate-smart homes.
<ul style="list-style-type: none"> Maintain and use a climate-smart home. 	<ul style="list-style-type: none"> Many do not adhere to the existing city regulations and guidelines, which increases risk to their homes through events like flooding or landslides. 	<ul style="list-style-type: none"> High cost of maintenance to ensure long-lasting climate resiliency. Lack of knowledge of the existing city regulations and guidelines. 	<ul style="list-style-type: none"> Understanding, application, and enforcement of city regulations and guidelines through information dissemination that promotes 	<ul style="list-style-type: none"> Maintenance and use the constructed climate-smart home. City and community oversight of maintenance of climate-smart homes.

Ideal Behavior	Current Reported and Observed Behaviors	Barriers to Ideal Behaviors	Facilitators to Motivators Ideal Behaviors	Feasible Behavior/Practice
	<ul style="list-style-type: none"> The houses are overcrowded, with the number of inhabitants normally higher than the national average (5 people per household). In cities, the number of people per household ranges from 7 to 9 in homes that are normally constructed using techniques that do not consider the need to withstand extreme weather to mitigate hazards currently experienced by many households in the cities or are constructed in areas that are at-risk and inappropriate for habitation. 	<ul style="list-style-type: none"> Engrained culture and customs about home construction. Limited access to cash for building resilient home and in safe location 	<ul style="list-style-type: none"> the maintenance and use of a climate-smart home. Desire to care for and improve well-being of family. Local stakeholder buy-in of the benefits of maintaining climate-smart homes. 	
Constructing, maintaining, and using climate-smart latrines				
<ul style="list-style-type: none"> Construct latrines – ideally climate-smart – in areas deemed not to be vulnerable to climate events and that is secure and in a properly zone location. 	<ul style="list-style-type: none"> Many use materials that are not sustainable and not resilient to climate changes. Many live in extremely vulnerable areas that are prone to floods, landslides, erosion, droughts, etc. Majority use bucket latrine, followed by pit latrine, and then VIP latrine regularly. Some use public toilets. Practice open defecation. Some defecate outside or in chamber pots and feces is thrown in the open outside the house. 	<ul style="list-style-type: none"> High cost of construction of a climate resilient latrine. Lack of familiarity and culture of climate resilient latrine construction. Unavailability of space to construct a latrine in built areas. Refusal of landlords to provide toilets. Bad smell and unclean public latrines. Latrines not child, girl and disability friendly. Lack of adequate water supply. Water logging 	<ul style="list-style-type: none"> Understanding, application, and enforcement of city regulations and guidelines and construction standards through information dissemination (e.g., findings/data of construction vulnerability analysis). Desire to care for and improve well-being of family. Local stakeholder buy-in of the benefits of climate-smart latrine construction. Creation of funds for construction of climate-smart latrines available to 	<ul style="list-style-type: none"> Build climate-smart latrines that is secure and in a properly zone location, using sustainable and climate resilient materials and design. If already have a latrine, continue to use it. Ask landlord to provide a climate-smart latrine. Build hand-washing facilities near all toilets. Always defecate into the pit to avoid messing up the toilet. Become open defecation free through the use of a climate-smart latrine.

Ideal Behavior	Current Reported and Observed Behaviors	Barriers to Ideal Behaviors	Facilitators to Motivators Ideal Behaviors	Feasible Behavior/Practice
	<ul style="list-style-type: none"> Many defecate in waterways, polluting the water with human waste. Some improperly use the latrines, especially children. Many build homes and latrines that are not climate-smart. 	<ul style="list-style-type: none"> High cost of removing sludge. Belief that latrines bring illness to the communities. Lack of understanding of the benefits of a climate resilient latrine. Limited space for constructing household latrines in tenement areas. 	<p>community members through an application process.</p> <ul style="list-style-type: none"> Privacy in general. Prestige and social status. Desire to avoid long queues in the morning. Fear of soiling oneself in case of diarrhea in the night. Knowledge of link between feces and diseases. Availability of model climate-smart latrines that are available throughout the target communities and can inspire people to build similar latrines. 	
<ul style="list-style-type: none"> Maintain and use latrines – ideally climate-smart – at all times. 	<ul style="list-style-type: none"> Many live in extremely vulnerable areas that are prone to floods, landslides, erosion, droughts, etc. Majority use bucket latrine, followed by pit latrine, and then VIP latrine regularly. Some use public toilets. Practice open defecation. Some defecate outside or in chamber pots and feces is thrown in the open outside the house. Some improperly use the latrines, especially children. 	<ul style="list-style-type: none"> High cost of maintenance to ensure long-lasting climate resiliency. Lack of knowledge and awareness of climate risks. Bad smell and unclean public latrines. Latrines not child, girl and disability friendly. Lack of adequate water supply. Water logging. High cost of removing sludge. Lack of understanding of the benefits of a climate resilient latrine. Males are hardly involved in the maintenance and cleaning of latrines at homes and in some cases, at school. 	<ul style="list-style-type: none"> Understanding, application, and enforcement of city regulations and guidelines through information dissemination that promotes the maintenance and use of a climate-smart latrine. Understanding the importance of being climate resilient. Desire to care for and improve well-being of family. Local stakeholder buy-in of the benefits of maintaining climate-smart latrines. Privacy in general. Prestige and social status. Desire to avoid long queues in the morning. Fear of soiling oneself in case of diarrhea in the night. 	<ul style="list-style-type: none"> If already have a latrine, properly maintain it and continue to use it. Draw a schedule to clean toilet in turns, in case of compound housing. Keep public toilets clean. Maintain and use hand-washing facilities near the toilet. Always defecate into the pit to avoid messing up the toilet. Become open defecation free through the use of a climate-smart latrine. Maintain climate-smart latrines.

Ideal Behavior	Current Reported and Observed Behaviors	Barriers to Ideal Behaviors	Facilitators to Motivators Ideal Behaviors	Feasible Behavior/Practice
			<ul style="list-style-type: none"> Knowledge of link between feces and diseases. 	
Constructing, maintaining, and using water catchment systems				
<ul style="list-style-type: none"> Construct water catchment systems in areas deemed not to be vulnerable to climate and that is secure and in a properly zone location. 	<ul style="list-style-type: none"> Most homes and schools do not have water catchment systems. Many live in extremely vulnerable areas that are prone to floods, landslides, erosion, droughts, etc. 	<ul style="list-style-type: none"> High cost of construction of water catchment systems. Lack of culture of climate resilient construction. Lack of knowledge on how to build water catchment system. Unavailability of space to construct a water catchment system in built areas. Water logging. Lack of adequate water supply. 	<ul style="list-style-type: none"> Desire to care for and improve well-being of family. Prestige and social status. Desire to avoid long queues at the water posts. Desire to increase accessibility to water. 	<ul style="list-style-type: none"> Build a water catchment system using sustainable and climate resilient materials and design at homes and schools. Build a water catchment system that is secure and in a properly zone location.
<ul style="list-style-type: none"> Maintain and use water catchment systems at all times. 	<ul style="list-style-type: none"> Many live in extremely vulnerable areas that are prone to floods, droughts, etc. People tends to rely on formal water supply system which did not yet cover the entire city Local borehole providing salt water unsafe for drinking 	<ul style="list-style-type: none"> Lack of knowledge and awareness of climate resiliency. Lack of adequate water supply. Lack of experience on using the water catchment system 	<ul style="list-style-type: none"> Understanding the importance of being climate resilient. Desire to care for and improve well-being of family. Prestige and social status. Desire to avoid long queues at the water posts. Desire to increase accessibility to water. 	<ul style="list-style-type: none"> If already have a water catchment system, properly maintain it and continue to use it. Draw a schedule to maintain the water catchment system in turns, in case of compound housing.
Safely disposing of household and other solid waste				
<ul style="list-style-type: none"> Dispose of solid waste generated at home, safely. 	<ul style="list-style-type: none"> Few place household refuse in bins with tight fitting lids. Most place refuse in polythene sacs, and uncovered bins. Most do not effectively use the city-designated trash sites or dumpsters and heap refuse 	<ul style="list-style-type: none"> High cost of trash bins. Current social norms on disposing of trash. Lack of awareness of the deterioration of climate due to waste. Lack of awareness of the negative environmental impacts associated with the 	<ul style="list-style-type: none"> Desire for a clean compound or environment. Desire to keep children healthy. Desire to avoid flies, rodents, and bad odor. Desire to have and use a city-run trash collection system from home to the landfill. 	<ul style="list-style-type: none"> Heads of household buy suitable trash bins. Place trash in appropriate bin and cover tightly. Properly dispose of trash at designated points that is regularly picked up through a city-run trash collection system.

Ideal Behavior	Current Reported and Observed Behaviors	Barriers to Ideal Behaviors	Facilitators to Motivators Ideal Behaviors	Feasible Behavior/Practice
	<p>at a designated corner of the house on trash days.</p> <ul style="list-style-type: none"> • Bins are not emptied regularly. • Household waste is thrown into gutters or open spaces. • Many through non-biodegradable waste in the waterways (e.g., bays, slopes of rivers, wetlands, etc.) and on their margins rather than properly dispose of the waste. 	<p>mismanagement of solid waste.</p> <ul style="list-style-type: none"> • Lack of awareness of the health dangers of decomposing waste. • Weak municipal enforcement of sanitation laws. • Lack of knowledge of proper waste management (including the reduction, reuse, and recycling of trash). • Inadequate solid waste collection services. • High cost of trash collection in some areas. 	<ul style="list-style-type: none"> • Fear of penalty by municipal authorities. 	<ul style="list-style-type: none"> • Regular pick-up of trash by municipality. • City enforcement of sanitation laws.
<ul style="list-style-type: none"> • Dispose of trash generated outside of the home safely. 	<ul style="list-style-type: none"> • Trash is thrown around indiscriminately. • Trash is dumped into gutters. • Trash is thrown down from moving vehicles. • Trash is used in an inappropriate and at-risk way in order to gain more land for housing construction, like dumping trash in the channels. 	<ul style="list-style-type: none"> • Absence of trash bins in public places. • Current social norms on disposing of trash. • Weak municipal enforcement of sanitation laws. • Inadequate solid waste collection services. • Lack of awareness of the deterioration of climate due to waste. • Lack of awareness of the negative environmental impacts associated with the mismanagement of solid waste. • Lack of knowledge of proper waste management (including the reduction, reuse, and recycling of trash). 	<ul style="list-style-type: none"> • Desire for a clean city, compound or environment. • Desire for improved public health. • Fear of penalty by municipal authorities. • Desire to have and use a city-run trash collection system from home to the landfill. 	<ul style="list-style-type: none"> • Place all trash in the appropriate bin provided in public places. • If travelling in vehicle, leave trash in vehicle. • Properly dispose of trash at designated points that is regularly picked up through a city-run trash collection system. • Regular pick-up of trash by municipality. • Enforced municipal sanitation laws.

Ideal Behavior	Current Reported and Observed Behaviors	Barriers to Ideal Behaviors	Facilitators to Motivators Ideal Behaviors	Feasible Behavior/Practice
Protecting and maintaining green infrastructure for coastal protection and to decrease pollution in the water				
<ul style="list-style-type: none"> Identify and define environmental protection areas 	<ul style="list-style-type: none"> Many destroy natural protection and local ecosystems critical to the city protection. Many easily attain land permits in sensitive/protection areas, such as dune areas along the shoreline, for residential and commercial construction. 	<ul style="list-style-type: none"> Weak municipal enforcement of environmental laws and regulations. Lack of awareness and knowledge of the importance of green infrastructure as important ecosystems and key for city and environmental protection (e.g., floods, erosion, and winds). Lack of understanding of environmental laws and regulations. 	<ul style="list-style-type: none"> Municipal enforcement of environmental laws and regulations. Desire for green areas in and around the city. Understanding of the importance of the natural ecosystem. Site with well managed green infrastructure; Ownership of the green infrastructure. 	<ul style="list-style-type: none"> Engagement in the protection of the ecosystem. Residents no longer easily attain land permits in sensitive/protection areas. Use of land use management tools (geographic information system - GIS, VM) for decision-making and enforcement of risk reduction measures and protection of sensitive ecosystems.
<ul style="list-style-type: none"> No longer cutting mangroves for wood, construction, or charcoal. 	<ul style="list-style-type: none"> Many cut mangrove for wood, construction, or charcoal. Others cut mangrove for the use of space for construction. Others cut mangrove for the construction of canoes. Others cut small leaves of mangrove to cover fish. 	<ul style="list-style-type: none"> Lack of awareness and knowledge of the importance of green infrastructure as important ecosystems and key for city and environmental protection (e.g., floods, erosion, and winds). Lack of awareness and knowledge of the importance of the mangrove for economic purposes. Weak municipal enforcement of environmental laws and regulations. Lack of understanding of environmental laws and regulations. 	<ul style="list-style-type: none"> Municipal enforcement of environmental laws and regulations. Understanding of the importance of the environmental, economic, and social benefits of the mangrove. Desire to practice optimal behaviors for protecting the environment based on environmental laws and regulations. Desire to protect the home from floods and other climate events. Enforcement of laws prohibiting cutting of mangrove. 	<ul style="list-style-type: none"> Replant green infrastructure for long-term coastline protection. Use other materials for construction and cooking, including to cover fish. Community members stop cutting mangroves and begin cultivating mangrove nurseries.
<ul style="list-style-type: none"> Protecting coastlines from fishing boats. 	<ul style="list-style-type: none"> Many dock their boats along the banks of the river in an 	<ul style="list-style-type: none"> Lack of places for dredging. Fishing is a very common economic activity in the 	<ul style="list-style-type: none"> Construction of places for dredging. 	<ul style="list-style-type: none"> Fishers build ramps at pre-defined so that their boats no

Ideal Behavior	Current Reported and Observed Behaviors	Barriers to Ideal Behaviors	Facilitators to Motivators Ideal Behaviors	Feasible Behavior/Practice
	<p>unregulated way that causes silting and erosion.</p> <ul style="list-style-type: none"> Many destroy dune zones when docking their boats. 	<p>targeted communities because of the lack of knowledge of economic alternatives to fishing.</p> <ul style="list-style-type: none"> Absence of reserved areas for boats to anchor. Lack of awareness of the negative impacts of the current anchoring practices to the coastline. 	<ul style="list-style-type: none"> The formation of fishing associations. Understanding of the importance of protecting the coastlines as a way to protect the environment. Understanding of other economic alternatives to fishing. 	<p>longer hurt mangroves and other green infrastructure.</p> <ul style="list-style-type: none"> Municipalities and communities work together to build paths so that fishers do not disrupt the mangroves in order to get to the river.
Realizing the potential economic benefits to drive the protection of green infrastructure				
<ul style="list-style-type: none"> Using mangroves for economic benefits like honey, crabs, and shrimp. 	<ul style="list-style-type: none"> Many do not leverage the potential of the mangrove for economic purposes due to lack of knowledge of these alternatives. 	<ul style="list-style-type: none"> Lack of knowledge about the importance of the mangrove for economic purposes. 	<ul style="list-style-type: none"> Understanding and empowered to protect the mangrove while still leveraging it for economic benefit. Desire to create businesses that leverage the mangroves. 	<ul style="list-style-type: none"> Produce honey and other bi-products. Create businesses related to shrimps and crabs.

CCAP's SBCC objectives

The SBCC strategy objectives are based on CCAP's goal and objectives (Annex 1) and its Causal Model for the Climate-Smart Cities branded SBCC platform (Annex 2).

Fundamentally, the SBCC strategy seeks to improve the climate resiliency of individuals and communities, ultimately working to strengthen the role of the municipality and other stakeholders in CCA and other services directly and indirectly linked. Given that this strategy is based on the CCAP's overall goal and objectives, we will measure our progress against the project's indicators, as noted in Annexes 4 and 5.

E. Key Interventions

Based on the analysis and formative research findings, presented in the previous sections above, we will conduct three main intervention areas to increase, encourage and sustain a change in climate resilient behaviors and practices. These intervention areas, which will fall under the Climate-Smart Cities branded SBCC platform, include:

1. Enabling environments, encompassing policies and advocacy, institutional development strengthening and creation, and sustained financing schemes;
2. Communication approaches to promote climate-smart behaviors and practices (e.g., IEC, SBCC, training, and mobilization); and,
3. Access to infrastructure, services, and systems.

Intervention 1: Enabling environment (policies, advocacy, institutional development, and financing)

Although the municipalities have some policies and guidelines to support urbanization, they do not have policies and guidelines to support CCA. They also lack the capacity to make plans that are in support of CCA. However, they are willing to work toward being supportive of CCA, including restructuring their government to include CCA. For example, both Pemba and Quelimane expanded a department to include the environment (Departamento de Mudanças Climáticas, Saneamento Básico e Água – Department of Climate Change, Basic Sanitation, and Water, and Departamento de Ambiente e Mudanças Climáticas – Department of Environment and Climate Change, respectively). CCAP has conducted various activities in order to strengthen the capacity of the municipalities and the high levels of government. In addition to building capacity through trainings in topic areas such as vulnerability mapping, CCAP also developed and conducted trainings on an EWS that has evolved into the SIGIU for the municipalities. CCAP also developed and conducted trainings on a similar system but at the national level, known as SIGIC. CCAP is in the process of further strengthening these systems and expanding their functionalities, such as the vulnerability maps being merged with the cadastre. Additionally, CCAP developed and trained the municipalities on sustainable development, climate compatible development, and the relationship between climate change impacts and sustainable development as part of the development of their municipality adaptation plans. Additionally training will be provided to the municipalities during Year 3, including DRR and CCA. All of these activities have helped and will continue to help increase awareness and knowledge of CCA and DRR, as well as begin to change attitudes and perspectives about the importance of being climate resilient.

CCAP will also continue to work with both municipalities to create a more favorable environment for people to practice desired behaviors by including climate-smart/resilient messages into ongoing programming; ensuring CCA and DRR are included in the municipality budgets; designing a CCA and DRR training package for local stakeholders that

encourages the integration of CCA and DRR in municipality management tools; among others. CCAP will also continue to build the capacity of municipal entities to provide leadership and guidance on systems and organizational structures needed to support the effort. Additionally, CCAP will continue to exposure the municipality leadership and technical team to international experiences in CCA and DRR as well as to become part of the international community that promotes climate resiliency. Ultimately, the municipalities will be better equipped to develop their own municipal adaptation plan and other city development plans supported by tools developed by CCAP.

Intervention 2: Communication approaches to promote climate-smart behaviors and practices

The Climate-Smart Cities branded SBCC platform will include a series of activities (e.g., IEC, IPC, community mobilization, etc.) at the national, municipal, community, and individual level supported by a full range of messages and materials, and disseminated through various communication channels. These activities, messages, materials, and communication channels will be linked to the primary and secondary audiences identified above (Tables 1 and 2) to ensure effective and long-lasting social and behavior change. Prior to launching the platform, a series of capacity building activities, based on a systematic delineation of possible training audiences and their needs, will be held to prepare influencers and stakeholders and garner their support. Topics that may be addressed include:

- Implementation of community-based activities
- CCA and DRR
- Green infrastructure
- Climate-smart houses, latrines, and water catchment systems
- Media training
- Community/social mobilization

Other capacity building and community/social mobilization activities will be implemented to encourage the needed social and behavior change and help to sustain climate-smart practices. We will leverage the organizations of the targeted communities and their leadership to mobilize quickly their members toward a common goal and to address their lack of knowledge and awareness of climate change and its risks. We will work with the municipalities to leverage the relationships they have established with various CSOs, CBOs, NGOs, and other international agencies as well as national government agencies to improve planning in support of CCA, to increase knowledge and awareness of climate change, and to ultimately change behaviors. Training and mobilization interventions will be used in conjunction with communication activities and tools.

Additionally, CCAP has developed an on-demand information system, known as the 3-2-1 Service, to respond to one of pillars of the National Strategy for Adaptation and Mitigation of Climate Change Impacts for 2012-2025, which prioritizes the access to relevant information and knowledge that enables more effective adaptation to climate change. The 3-2-1 Service will also support the optimal behaviors and practices promoted by the branded SBCC platform. To ensure effective messaging and buy-in, CCAP has been

3-2-1 Service Entities and Stakeholders

- INGC
- MITADER
- Ministry of Agriculture and Food
- Ministry of Health
- The World Food Program
- Famine Early Warning System Network
- World Wide Fund For Nature
- Africa Climate Change Resilience Alliance
- Mozambique Red Cross (*Cruz Vermelha de Mozambique* - CVM)
- International Union for Conservation of Nature
- Eduardo Mondlane University (*Universidade Eduardo Mondlane* – UEM)

collaborating with INGC and other entities and stakeholders, including representatives from the Municipalities of Pemba and Quelimane, on the information design and delivery for the 3-2-1 service mobile technology platform. Thus far, CCAP and these entities and stakeholders have selected and prioritized relevant development themes in CCA and DRR to be used in the 3-2-1 Service. Once launched, this platform will allow INGC and these entities and stakeholders to deliver key CCA and DRR information through voice, SMS, and USSD via existing mobile phone networks.

Intervention 3: Access to services and systems

The municipalities have established services and systems to address key aspects of CCA and DRR. However, these services and systems are weak, lack resources, and are not as accessible. More work needs to be done to improve them and to facilitate the adoption and sustained practice of climate-smart behaviors. To this end, CCAP will continue to work with the cities to strengthen these key services and systems and ensure that CCA and DRR is systematically incorporated. The CCAP-developed systems and tools (e.g., SIGIU, SIGIC, vulnerability maps, etc.) will facilitate the municipalities' ability to regularly and more effectively assess the municipalities' status. Additionally, in case of an emergency, the municipalities will be able to attain information and be able to better respond to climate change-related events occurring in their cities. The same systems will also help to ensure regular and systematic collection, management, and access to information for decision-making in regard to municipality planning and development, which is currently one of the most serious challenges present at the municipality level.

While any one of these intervention areas can encourage optimal behaviors and practices, when used together as part of the Climate-Smart Cities branded platform, they can effectively increase adoption and sustainable probability of desired behaviors and practices, as presented in the Causal Model for the Climate-Smart Cities branded SBCC platform (Annex 2).

Section 4: The Creative Brief

This creative brief provides a general description of the messages, materials/medium, and communication channels to be developed and used as part of Climate-Smart Cities branded SBCC platform. This brief is based on CCAP's SBCC objectives (Section 2) previously presented, the Theory of Change, as well as specific changes desired of the target audience. It takes into account the knowledge, attitudes, and practices with regard to climate change. A more definitive set of messages, medium/tools, and communication channels that are target-centric will be developed and tested at a later stage as part of the branded SBCC platform implementation plan.

A. The Mozambican communication context

Literacy rates in Mozambique

- The current total adult (ages 15 and above) literacy rate is 50.6%, with males (70.8%) having a higher literacy rate than females (42.8%).⁷

⁷ UNDP, 2014: Human Development Report: Sustaining Human Progress, Reducing Vulnerability and Building Resilience. pg. 245. Last visited on 12/21/15: http://hdr.undp.org/sites/default/files/hdr_2015_statistical_annex.pdf

- The current male and female youth (ages 15 to 24) literary rate is 79.8% and 56.5%, respectively.⁸
- Past data has shown that for the most part the level of illiteracy in the Northern provinces is higher than the rest of the country, despite the gradual decline that has been observed in the country.

Media Communication Channels in Mozambique

- In 2014, 5.9% of the population were Internet users.⁹
- In 2014, 30.3% of the population covered by mobile.¹⁰
- The radio and TV are by far the most popular mass communication channels in the country, and would be effective for conveying climate change information and education in communities.
- Per IREX's 2012, Media Sustainability Index, there are 263 active print outlets, 88 active radio stations, including community stations, and 5 TV stations.¹¹
- Rádio Mozambique (RM) is the largest radio outlet, broadcasting to the entire country, through government financial support, with coverage in Portuguese, English and the major local languages spoken in the respective province.¹²
- About 17 Community Multimedia Centers, developed with support from the United Nations Educational, Scientific and Cultural Organization (UNESCO), also exist, providing a direct gateway between radio and internet by combining a community radio and a community telecenter, resource center, or cyber space.^{13,14}
- The community broadcasting sector has been growing and represents over 60 community radio and TV stations spread throughout the country, and receive funding from a variety of organizations, including the Catholic Church, the General Union of Agricultural and Livestock Cooperatives of Maputo (União Geral das Cooperativas de Maputo), IBIS, the Social Communication Institute (Instituto de Comunicação Social), and UNESCO.¹⁵
- Televisão de Moçambique (TVM) is the largest TV outlet. As a public company that receives government financial support, they broadcast to the entire country.¹⁶

Tables 4 and 5 below provide an overview of the types of media communication channels.

⁸ UNDP, 2014: Human Development Report: Sustaining Human Progress, Reducing Vulnerability and Building Resilience. pg. 245. Last visited on 12/21/15: http://hdr.undp.org/sites/default/files/hdr_2015_statistical_annex.pdf

⁹ UNDP, 2014: Human Development Report: Sustaining Human Progress, Reducing Vulnerability and Building Resilience. pg. 265. Last visited on 12/21/15: http://hdr.undp.org/sites/default/files/hdr_2015_statistical_annex.pdf

¹⁰ UNDP, 2014: Human Development Report: Sustaining Human Progress, Reducing Vulnerability and Building Resilience. pg. 265. Last visited on 12/21/15: http://hdr.undp.org/sites/default/files/hdr_2015_statistical_annex.pdf

¹¹ IREX, 2012: Media Sustainability Index – Mozambique. pgs. 274-287. Last visited on 12/21/15: <https://www.irex.org/sites/default/files/u115/Mozambique%202012%20MSI%20Proof.pdf>

¹² IREX, 2012: Media Sustainability Index – Mozambique. pgs. 274-287. Last visited on 12/21/15: <https://www.irex.org/sites/default/files/u115/Mozambique%202012%20MSI%20Proof.pdf>

¹³ UNESCO: Community Multimedia Centres in Africa. Last visited on 12/21/15: <http://www.unesco.org/new/en/dakar/communication-information/community-multimedia-centres-cmcs/>

¹⁴ Open Society Foundation, 2010: A Survey by the Africa Governance Monitoring and Advocacy Project of the Open Society Initiative for Southern Africa of the Open Society Media Program. pg. 16. Last visited on 12/21/15: <http://www.afrimap.org/english/images/report/Moz%20Broadcasting%20Survey%20Eng%20Web.pdf>

¹⁵ Open Society Foundation, 2010: A Survey by the Africa Governance Monitoring and Advocacy Project of the Open Society Initiative for Southern Africa of the Open Society Media Program. pg. 16. Last visited on 12/21/15: <http://www.afrimap.org/english/images/report/Moz%20Broadcasting%20Survey%20Eng%20Web.pdf>

¹⁶ IREX, 2012: Media Sustainability Index – Mozambique. pgs. 274-287. Last visited on 12/21/15: <https://www.irex.org/sites/default/files/u115/Mozambique%202012%20MSI%20Proof.pdf>

Table 4: List of broadcasting services¹⁷

Name	Owner	Languages	Coverage	Type
RM	State	<ul style="list-style-type: none"> Portuguese and English plus 19 national languages 	<ul style="list-style-type: none"> 80% of national territory 	<ul style="list-style-type: none"> Increasingly independent from the government
TVM	State	<ul style="list-style-type: none"> Portuguese and Xindau (in Beira City) 	<ul style="list-style-type: none"> 80% of national territory 	<ul style="list-style-type: none"> Under strong government
SOICO Television (STV)	SOICO	<ul style="list-style-type: none"> Portuguese 	<ul style="list-style-type: none"> 70% of national territory 	<ul style="list-style-type: none"> Independent
TIM (TV)	TIM Media	<ul style="list-style-type: none"> Portuguese 	<ul style="list-style-type: none"> Maputo, Beira, Quelimane, Nampula, Pemba and Tete provinces 	<ul style="list-style-type: none"> Independent

Table 5: List of broadcasting services¹⁸

Name	Number	Owner	Languages	Type
Community radio	33	<ul style="list-style-type: none"> Civic associations 	<ul style="list-style-type: none"> Portuguese and local languages 	<ul style="list-style-type: none"> Independent
Local rural radio	21	<ul style="list-style-type: none"> Institute for Social Communication (State) 	<ul style="list-style-type: none"> Portuguese and local languages 	<ul style="list-style-type: none"> Government-controlled
Local rural TV stations	2	<ul style="list-style-type: none"> Institute for Social Communication 	<ul style="list-style-type: none"> Portuguese and local languages 	<ul style="list-style-type: none"> Government-controlled
Religious radio	6	<ul style="list-style-type: none"> Catholic Church and United Methodist Church 	<ul style="list-style-type: none"> Portuguese and local languages 	<ul style="list-style-type: none"> Church/Independent

Other Forms of Communication Channels in Mozambique

- Face-to-face communication is also a reliable and primary source of information.
- Gossip (Grapevine) has also been very important part in the spread of information among friends and peers in the communities.
- The value attached to information received by word-of-mouth is dependent on who communicates it. There is a need to further explore who the most respected people are and how they can be used as effective channels.
- There are various types of extension workers, community workers, and communities. Their participation and support in spreading information and promoting long-term social and behavior change has been shown to be effective.
- Traditional/indigenous media (e.g., storytelling, folklore, etc.) can be integrated with modern media. Other sectors (e.g., health, education, etc.) have been effective in using songs/folk songs, poetry, folk tales, drama, among others, to spread educational information. Social events also have the potential for sharing information among large numbers of people.
- Community-based communication tactics should be encouraged for indigenous-style settlements in urban and peri-urban areas, while traditional /indigenous media are integrated with conventional mass media. It is essential to involve communities in developing any programs that use traditional/indigenous channels to reach their target audiences because communities can best assess the appropriateness of messages as well as the media through which such messages can be delivered to the targeted audiences.

¹⁷ Adapted from Open Society Foundation, 2010: A Survey by the Africa Governance Monitoring and Advocacy Project of the Open Society Initiative for Southern Africa of the Open Society Media Program. pg. 16. Last visited on 12/21/15: <http://www.afrimap.org/english/images/report/Moz%20Broadcasting%20Survey%20Eng%20Web.pdf>

¹⁸ Adapted from Open Society Foundation, 2010: A Survey by the Africa Governance Monitoring and Advocacy Project of the Open Society Initiative for Southern Africa of the Open Society Media Program. pg. 16. Last visited on 12/21/15: <http://www.afrimap.org/english/images/report/Moz%20Broadcasting%20Survey%20Eng%20Web.pdf>

- Communities are also able to assist in couching and packaging the appropriate messages to particular audiences.
- Apart from school, students can learn about climate change through media and in the house by their parents and vice-versa.

B. Key Messages

Preliminary messages have been outlined to translate the Climate-Smart Cities branded SBCC platform into specific actions. These messages are based on the current formative research findings and most likely will evolve as more information is collected, such as from the Household Socio-Economic and Infrastructure Assessment (Annex 3). It is important to ensure a shared and consistent understanding of CCA priorities, needs, change indicators, and critical messages across the different stakeholders and influencers. Preliminary examples of the messages for the six behaviors that may be included in the Climate-Smart Cities branded SBCC platform implementation plan are listed below, namely:

- Safe disposal of household solid waste
- Safe disposal of other solid waste
- Construction, maintenance, and use of climate-smart homes in properly zoned areas to protect your home from flooding
- Construction, maintenance, and use of climate-smart latrines to prevent pollution and protect your community and family from disease
- Construction, maintenance, and use of water catchment systems to increase access to water
- Use a climate-smart latrine and stop defecating openly
- Grow and protect green infrastructure because it protects you from coastal flooding and erosion
- Protect green infrastructure and make honey
- Use waste collection bins to properly throw away your trash
- Use safe trucks for carting solid and liquid waste in cities to avoid contamination of the environment through spilling
- City authorities, provide waste collection bins
- Help the environment and do not litter

The Message Tone¹⁹

A message's tone is based on the orientation, or the nature of the call, of each message so that it will have the most influence on the target group. Known characteristics of the target group and lessons learned help guide which of the different types of tones (or a combination of them) should be used. Following are examples of the message tones that may be included in the Climate-Smart Cities branded SBCC platform implementation plan.

- Emotional message, which is linked to emotions, such as love, fear, anxiety, security, rather than a rational message that has a call to logical arguments or proof);
- A positive message showing that there is a favorable solution to the known risk, rather than a negative message that presents the dark and threatening situation which would arise if the target group does not follow the desired course of action;
- A call to the group (group pressure) rather than a customized call with personalized arguments;

¹⁹ Adapted from the Food and Agriculture Organization of the United Nations, 2001: Communication for Development Manual - Methodological Guide for Designing and Implementing a Multimedia Communication Strategy.

- A humorous message that allows a serious message to be transmitted pleasantly with humor rather than a serious message with rigorous, plain talking;
- A single-minded message rather than a message with several points of view, in the form of a debate, or clashing ideas;
- A message with a definitive, desired conclusion rather than a message with an open-ended conclusion, which allows the target group to reach its own conclusion and make its own opinion;
- A repetitive message that repeats the message multiple times rather than a unique message only sent once.

Additionally, the source of the message, or spokesperson, should be someone who the target group finds credible, such as an expert, political authority, moral or religious authority, a peer, development worker, etc. Identifying the spokesperson requires knowing the criteria of credibility in the area where the message will be passed. The project will identify the spokesperson(s) in the Climate-Smart Cities branded SBCC platform implementation plan.

C. Communication Tools, Materials, and Other Medium

The medium or tools to be used to facilitate the dissemination of messages to the identified targeted audiences needs to be determined. Additionally, formative research findings show that not many materials or tools related to CCA have been developed for the identified target audiences. As such, investment is needed for the development of the tools. Additionally, these tools must be target-centric, where the target audiences are included in the steps to develop the tools, and specific to the primary and secondary audiences to ensure optimum influence. Examples of the types of medium or tools that could be used are listed below.

- | | | |
|---------------------|-----------------------------------|--|
| • Film/video | • Games | • Painting |
| • Poster | • Exhibition/demonstration center | • Diagrams/models |
| • Pamphlet/brochure | • Sign | • Drama/theatre |
| • Flyer | • Banner or wall-cloth | • Music |
| • Magazine | • Flip-chart | • Poetry |
| • Stamps | • Model | • Incentives (e.g., bags, key rings, hats, t-shirts) |
| • Calendar | | |

The project will identify the tools, materials, and other medium in the Climate-Smart Cities branded SBCC platform implementation plan.

D. Communication Channels

The communication channels used to disseminate messages to the targeted audiences also need to be determined. It must be noted that in Mozambique, some of the channels are well developed and only require a little effort to build on. For example, TV and radio have an already-established network for message dissemination. Others will require additional support before they are used to disseminate messages and materials/tools. Four main categories of communication channels have been identified for delivering messages to the target audiences as part of the Climate-Smart Cities branded SBCC platform (Table 6).

Table 6: Identified Communication Channels for Message Delivery²⁰

Channel	Description	Advantages	Disadvantages
Institutional	<ul style="list-style-type: none"> Recognized public and private bodies such as the education systems, national, provincial, district, and local government entities (e.g., MITADER, municipalities, INGC, etc.), networks of development workers, NGOs, etc. 	<ul style="list-style-type: none"> Has a network of field staff Well-organized, structured (nationally) Formal and performing in view of its hierarchical nature 	<ul style="list-style-type: none"> Risk of political connotation and of rejection Possible cumbersome bureaucracy to deal with Its major players change a lot At the more local levels, weaker organization and structure
Media	<ul style="list-style-type: none"> Media bodies and information and communications technology (ICTs), such as TV, radio, printed press, posters, and Internet. Social media networks such as Facebook, Instagram, Twitter, and YouTube 	<ul style="list-style-type: none"> Reaches a large part of the population Public finds it attractive Reaches even the most isolates areas Has a variety of media at its disposal 	<ul style="list-style-type: none"> Poorly targeted Relatively high costs in equipment and in production Requires specialists
Commercial	<ul style="list-style-type: none"> The marketing circuits for climate-smart services and systems, such as constructions companies, private sector and trade associations, etc. 	<ul style="list-style-type: none"> Aggressive (using commercial techniques) Is well-organized and in the field 	<ul style="list-style-type: none"> Requires purchasing power Is driven by viability
Socio-traditional/Socio-cultural	<ul style="list-style-type: none"> Opinion leaders (customary chiefs, religious leaders, notables, cadres, intellectuals, etc.) and other informal networks (neighbors, various groupings) Various forms and opportunities of traditional popular and inter-personal communication (collective work in the fields, talks, markets, etc.) 	<ul style="list-style-type: none"> Matches the values and logic systems of the community, of which it is a part Its media are low-cost 	<ul style="list-style-type: none"> Hard to recognize and to control Can be manipulated by its leaders Can appear to be outmoded to some

²⁰ Adapted from the Food and Agriculture Organization of the United Nations, 2001: Communication for Development Manual - Methodological Guide for Designing and Implementing a Multimedia Communication Strategy.

E. Communication Actions

Based on the identified and developed messages, materials/tools, and communication channels, a set of communication actions will need to be determined for the various primary and secondary target audiences. These actions will help further formalize the types of messages, materials/tools, and communication channels to be used. Table 7 below provides a set of possible actions for the various target groups to inform the development of the Climate-Smart Cities branded SBCC platform implementation plan that will include a finalized set of appropriate messages, materials/tools, and channels when planning for implementation.

Table 7: Communication Tactics for Target Groups

Target Group	Brief Description/Justification	Tactics
Homeowners (men and women) (literate and non-literate)	<ul style="list-style-type: none"> • They are a major source of influence on children's and youth's behaviors as they spend a lot of time with them. • They are the decision-maker for what takes place in the home. 	<ul style="list-style-type: none"> • Focus group discussions and gender-specific group meetings • Community associations and committees • Posters and newspapers • Community leaders, municipal leaders, and faith-based leaders • Radio – talks, soap operas, etc. targeting these groups
Children (0- to 17-years-old)	<ul style="list-style-type: none"> • They are a vulnerable group and have been shown to be effective change agents as peers and at the household level. • Children play around a lot out of the house. • They are ready to learn new things 	<ul style="list-style-type: none"> • Interpersonal communication through homeowners and teachers and other school staff • Environment clubs • Extracurricular activities and clubs • Posters, flyers and drama • Churches and mosques • Schools • Sports and games (soccer, jump rope, etc.)
Youth (17- to 29-years-old)	<ul style="list-style-type: none"> • They have been shown to be effective change agents as peers and at the household level. • They are ready to learn new things 	<ul style="list-style-type: none"> • Posters, flyers and drama • Churches and mosques • Schools and universities • Clubs and community-based or youth organizations • Sports and games (soccer, jump rope, etc.)
Community members Fishers Beekeepers	<ul style="list-style-type: none"> • They could be agents of change. 	<ul style="list-style-type: none"> • Folk songs • Strengthening and/or formation of associations (e.g., beekeepers) • Focus group discussions and gender-specific group meetings • Community associations and committees • Posters and newspapers • Community leaders, municipal leaders, and faith-based leaders • Radio – talks, soap operas, etc. targeting these groups
CSOs, CBOs, NGOs, etc.	<ul style="list-style-type: none"> • They can be a resource of influence on youth's and adults' behaviors. 	<ul style="list-style-type: none"> • Strengthening and/or formation of associations (e.g., beekeepers) • Training in CCA and DRR • Campaigns and advocacy for community members to demand climate-smart services and systems

Target Group	Brief Description/Justification	Tactics
<ul style="list-style-type: none"> • Municipalities • Community leaders • Faith-based leaders • Teachers and other school staff 	<ul style="list-style-type: none"> • These hold authorities to make and enforce local laws in communities. • They control waste generation. • They could be agents of change. • They are a major source of influence on children's and youth's behaviors as they spend a lot of time with them. 	<ul style="list-style-type: none"> • SBCC manual • Public hearings • Posters • Videos • Leaflets, brochures, etc. • Involve municipalities in community education • Incentives • Waste collection • Education and training • Experience exchange • Community/municipal competitions

Section 5: Management Plan and Considerations

This section outlines the key elements necessary for the effective implementation of the Climate-Smart Cities SBCC strategy, including how it will be managed, monitored, and evaluated.

A. Institutional Framework and Partner Roles and Responsibilities

The institutional framework defines the institutions, roles, and relationships that are necessary to ensure the effective implementation of the strategy. For the Climate-Smart Cities branded SBCC platform, CCAP will lead and coordinate the implementation of activities. The memorandum of understanding outlining the relationship between the municipalities and CCAP will be leveraged given that the branded SBCC platform is an extension of CCAP's work. Annex 6 provides an overview of the key entities in Mozambique and their roles.

B. Materials Production Plan (for communication materials)

The production of materials or media in support of the Climate-Smart Cities branded SBCC platform can involve significant resources and several partners, such as content specialists, communication experts, technical advisory services, members of target groups, production technicians and artists, media professionals, traditional communicators, researchers, centers for the production and reproduction of materials, future (end-) users. This requires the establishment of mechanisms for ensuring the participation of all stakeholders. In light of this, CCAP will hold workshops and trainings to develop a materials production plan, as part of the Climate-Smart Cities branded SBCC platform implementation plan. In this plan, CCAP will describe the various tasks associated in the development of materials, the production methodology, the timeframe for each task, and the resources needed (human, technical, and financial) for completing work on each medium, as well as presenting the allocation of responsibilities.

C. Plan for capacity building

The successful implementation of this strategy through the Climate-Smart Cities branded SBCC platform implementation plan will depend on adequate and quality human resources at all levels of implementation. CCAP will conduct capacity building activities to ensure that stakeholders have the knowledge, attitudes, and skills required to effectively fulfill their roles in the branded SBCC platform. Some of these activities have already taken place

through ongoing CCAP capacity building activities for these stakeholders. However, additional capacity building will be needed, including for beneficiaries, media professionals, traditional communicators, artists, and designers, among others. A more comprehensive training plan will be developed as part of the Climate-Smart Cities branded SBCC platform implementation plan, describing the training needs, intended audiences, general goals and objectives, major axes of the content, responsible people, timespan, and other relevant aspects.

D. Budget

In order to assess the costs of the Climate-Smart Cities branded SBCC platform, the project will review and list activities and the resources required for their implementation, and evaluate all categories of expenditure:

- Research activities, monitoring and evaluation (M&E) activities (salaries/fees, travel expenses, supplies, processing and analysis of data, publication of reports, feedback workshops on results, etc.);
- Capacity building (fees, training material, organizational expenses, provision for participants' costs, etc.);
- Production and dissemination of materials and tools (design workshop, artists' and content experts' fees, fungible costs, reproduction costs, distribution and dissemination costs, etc.);
- Communication activities (equipment, travel, field expenses, costs of special events, such as press conferences, open days, etc.)

As a part of an already-existing project, these costs are already associated with the CCAP budget.

E. Timeline

Given that the Climate-Smart Cities branded SBCC platform is a part of CCAP, its activities are a part of the project's work plan. Currently planned activities are therefore presented in the CCAP Year 3 Work Plan.

F. Monitoring and evaluation – measuring progress and evaluating impact

The Climate-Smart Cities SBCC strategy calls for implementation as well as M&E as one continuous process in order to supply data needed to make good decisions along the way. Through M&E, CCAP will be able to document the processes and assess quality of work towards positive outcomes.

Indicators

Process and outcome indicators will be defined and collected. Outcome indicators will help us assess the change in behavior and social norms, while process indicators will inform us as to whether the activities through which this outcome is to be achieved have been undertaken with sufficient coverage and quality. In addition to these process indicators, another set of indicators of intermediate social and behavior change will be needed while undertaking SBCC. These will relate to the various steps in social and behavior change (e.g., knowledge, approval, intention, trial and practice, not necessarily in that order). These indicators will help to monitor the relationship and movement between information/knowledge, skills, motivation, enabling environment, and behavior change. Examples of the

types of indicators are included in Annexes 4 and 5 as an illustration of how indicators can be designed.

Monitoring and Feedback

A strong element of participation will be built into monitoring. This participation will be reflected through planned periodic feedback sessions with field level input. The correct choice and use of indicators will enhance the quality of monitoring.

Evaluation

Evaluation can be of outputs and of outcomes or of the impact. The actual impact of SBCC interventions in terms of CCA outcomes is, however, difficult to assess because the impact on the climate depends on many more elements beyond SBCC activities and cannot always be directly attributed to one intervention. Additionally, the results of CCA interventions can take time to happen and are not easily measurable in a limited time period. Impact evaluation requires preliminary information collected at the beginning of the interventions, a management information system, as well as an evaluation design that allows establishing associations among environmental factors (physical, psycho-social-cultural-economical) and factors related to environment sector interventions contributing to changes in climate change, including SBCC interventions.

Section 6: Observations, Recommendations, and Conclusion

A. Observations

Mozambique is in a state of considerable change defined by an increasing commitment to CCA and DRR. The National Government has already developed a national strategy to address climate change and its effect on the country. What follows will be the development of an institutional framework consisting of a growing number of policies, legal and regulatory mechanisms, and organizations with well-defined mandates to address CCA and DRR. Much work still needs to be done to fully establish a structure that is cross-cutting and defines clear roles and responsibilities among all public and private stakeholders at all levels. Another challenge will be raising the importance of climate change when there are other challenges competing for resources, funding, and capable personnel. Another challenge is the fact that roles, responsibilities and activities of key actors keep changing rapidly, and hence it is sometimes difficult to track performances and progress. Additionally, the concept of climate change and its negative effects is new to Mozambique. Thus, not many actors fully understand the concept.

B. Recommendations

1. An implementation plan based on the Climate-Smart Cities SBCC Strategy should be developed and updated regularly as a living document.
2. The Climate-Smart Cities branded SBCC platform should be launched in Quelimane, Pemba, and any other city where CCAP is implementing, to improve the climate resiliency of individuals and communities, ultimately working to strengthen the role of the municipality and other stakeholders in CCA and other services.
3. A Climate-Smart Cities SBCC Handbook or Manual should be developed based on this strategy and the implementation plan.
4. A Training-of-Trainers Manual on Climate-Smart Cities SBCC with its various sections should also be developed.

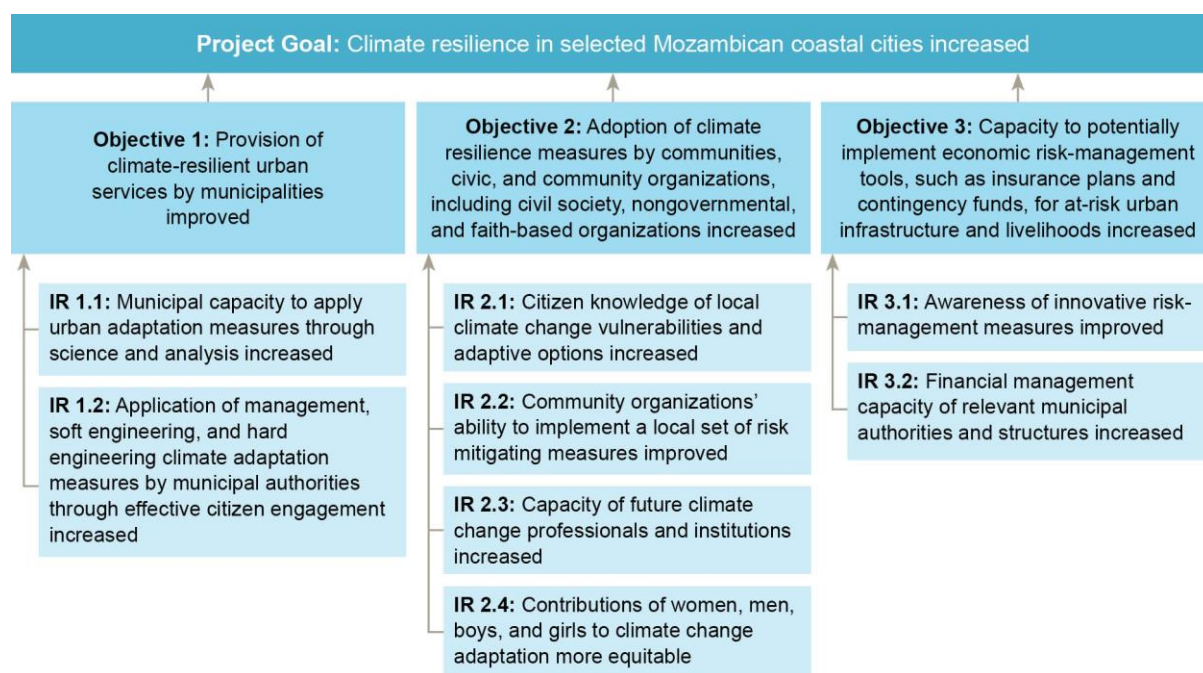
5. A custodial institution for the Climate-Smart Cities branded SBCC platform should be identified to ensure sustainability and continuity of efforts.
6. The Climate-Smart Cities branded SBCC platform should leverage the current work conducted by CCAP to further develop and solidify the capacities, structures, and systems linked to climate change.

C. Conclusion

Despite the many challenges of climate change, some positive conclusions can be drawn about the CCA and DRR efforts in Mozambique. Although CCAP can launch and initially implement the strategy, identifying an institutional home for this strategy is important to ensure that the various activities critical for change of behavior and social norms at the individual and community levels can be carried out so that the full benefits of CCA and DRR interventions can be realized.

This strategy has examined the key actors in the CCA and DRR social and behavior change communication efforts. The roles of these actors towards beneficiaries and their roles to each other have also been considered and described in this strategy. It is hoped that SBCC will make its way into the formal planning process of CCA and DRR interventions to ensure full integration of SBCC with the relevant sectors. This will not only ensure sustainable implementation of the strategy, but also the efficient use of scarce resources in its implementation in a holistic and well-integrated manner to achieve the required and desired results.

Annex 1: CCAP's SBCC strategy objectives



Annex 2: CCAP's Causal Model for the Climate-Smart Cities Branded SBCC Platform

KEY ENTRY POINTS	ILLUSTRATIVE ACTIVITIES	OUTPUTS	OUTCOMES/IMPACT
National/Provincial/District <ul style="list-style-type: none"> Ministry of Land, Environment, and Rural Development (MITADER) Ministry of Science and Technology National Disasters Management Institute (INGC) Provincial INGC Provincial Directorate for Education Provincial Directorate for Education in Pemba and Quelimane Provincial Directorate for Agriculture Provincial Directorate for Health in Pemba and Quelimane National Climate Change Strategy 2013-2025 Confederation of Economic Associations of Mozambique (CTA) National Association of Municipalities in Mozambique (ANAMM) 	<ul style="list-style-type: none"> Capacity building on data collection and analysis to drive policy, planning, and budget in support of climate change adaptation (CCA) and disaster risk reduction (DRR) Dissemination and fostering dialogue and adoption of CCA and DRR measures Development and training on the use of the Integrated Disaster Information Management System (SIGIC) in partnership with INGC Harmonization and dissemination of CCA and DRR messages and materials targeted to different audiences, including through the 3-2-1 service Development and provision of in-service CCA and DRR training packages aligned with best practices (in-person, online, CD-ROM) Information exchanges through conferences, city-to-city events, etc. Communication campaign to increase awareness and knowledge of climate resiliency – promoting climate-smart cities Identification of leaders and champions to formally promote the SBC campaign 	<ul style="list-style-type: none"> Strengthened long-term capacity at all levels to manage, finance, and advocate for climate resilient programs throughout the country Strengthened coordination among the various sectors (MITADER, INGC, municipalities, etc.) to promote climate resiliency Increased application of management, soft engineering, and hard engineering climate adaptation measures by municipal authorities through effective citizen engagement Increased capacity of future climate change professionals and institutions Increased financial management capacity of relevant municipal authorities and structures Operationalization of existing multi-sectoral policies and frameworks Improved awareness of innovative risk-management measures Increased technical leadership and capacity at municipal levels Increased capacity of NGOs, to provide climate resilient services Institutionalized in-service training program in private and public institutions across sectors in climate resiliency Increased climate resilient core competencies Increased community-led responses to support rapid adoption of optimal climate resilient behaviors Increased citizen knowledge of local climate change vulnerabilities and adaptive options 	<ul style="list-style-type: none"> Climate resiliency in Mozambican coastal cities Strengthened overall climate resilient enabling environment Improved provision of climate-resilient urban services at the municipality level Increased municipal capacity to apply urban adaptation measures through science and analysis Increased adoption of climate resilient measures by communities, civic, and community organizations, including civil society, nongovernmental, and faith-based organizations Improved community organizations' ability to implement a local set of risk mitigating measures More equitable contributions of women, men, boys, and girls to climate change adaptation Increased capacity to implement economic risk-management tools for at-risk urban infrastructure and livelihoods Fully-integrated climate resilient programming at the national, provincial, district, and municipal levels Improved adoption of optimal climate resilient behaviors Improved adoption of optimal WASH behaviors for clean, safe HH environment Increased number of ODF-certified communities Increased access to climate smart technologies at the HH level
Private Sector/Academia <ul style="list-style-type: none"> Eduardo Mondlane University (UEM) Lúrio University (Unilúrio) Pedagogic University Municipal Sanitation Company (EMUSA) (Quelimane) Builders Associations Beekeepers, Horticulture, and Fish Farming Associations Incala Red Cross of Mozambique (CVM) CVM Provincial Delegation 	<ul style="list-style-type: none"> Facilitation of dialogue and establish partnership/collaboration with INGC, MITADER, among others, to increase climate resiliency in Mozambique Development of in-person and online university courses on CCA and DRR Promote best practices and techniques for construction of resilient community infrastructures Development of community livelihood diversification and protection of green infrastructure Linking of private sector and academia activities with municipal levels 		
Municipal <ul style="list-style-type: none"> Coordination Committees Provincial Community-Based Health Care Officers Non-governmental organizations (NGOs) Department of Urban Soil Management (Pemba) Department of Infrastructure (Pemba) Department of Climate Change, Water, and Sanitation (Pemba) Department of Urbanization and Construction (Quelimane) Department of Environment, Climate Change, Cemeteries, and Gardens (Quelimane) Department of Sanitation, Water, and Energy (Quelimane) Department of Agriculture, Fisheries, and Livestock (Quelimane) Department of Communication and Images (Quelimane) Departments of Planning and Finance, Health, and Education (both) Department of Public Relations/Communications (both) Heads of Posts (both) Heads of Neighborhoods (both) 	<ul style="list-style-type: none"> Information exchanges through conferences, city-to-city events, etc. Capacity building to improve services at the municipal level, including zoning designations, solid waste management, fundraising, etc. LGSAT/municipal assessments Gender and youth analysis Development of vulnerability maps and integration into the cadaster Development and use of the municipal adaptation plan In-service training of municipal workers, including CCA, DRR, growth and maintenance of green infrastructure, municipal adaptation plans, etc. aligned with best practices (in-person, online, CD-ROM) Programming, managing, monitoring, and analyzing climate adaptation, solid waste management, among other services Planning and coordination of activities across sectors for improved climate resiliency Green infrastructure rapid assessments Sensibilization of municipal government sectors about optimal climate adaptation behaviors through various communication channels and tactics (i.e., workshops, IEC, etc.) Communication campaign to increase awareness and knowledge of climate adaptation services available Development and training on the use of the SIGIC in partnership with municipalities Climate-smart households Capacity building on community emergency first aid in urban humanitarian contexts 		
Community <ul style="list-style-type: none"> Community workers (CWs) Community Committees Committees for Natural Resource Management (Quelimane) Committees for Disaster risk management Community Development Councils Faith-based Groups and leaders Agriculture extension workers Teachers Community Leaders and Secretaries Women's groups Farmers organizations Fishers and beekeepers 	<ul style="list-style-type: none"> Linking of private sector and academia activities with communities Development and provision of CCA and DRR training packages aligned with best practices (in-person, online, CD-ROM) Capacity building on the growth and maintenance of green infrastructure Capacity building on the production of mangrove honey and bi-products and fishing Capacity building on emergency response along with in-kind emergency kits Facilitate dialogue and establish partnership/collaboration with municipality to increase climate resiliency services Sensibilization of community stakeholders about optimal climate resilient behaviors through various communication channels and tactics (i.e., IEC, IPC, etc.) Communication campaign to increase awareness and knowledge of climate resilient services available Climate-smart households Community HH and garden demonstrations School-based activities like extramural clubs, competitions, curriculum, etc. Capacity building on community emergency first aid in urban humanitarian contexts 		
Household and Individual <ul style="list-style-type: none"> Homeowners (men and women) Children 	<ul style="list-style-type: none"> Community-based integrated climate resilient activities Climate-smart home demonstrations 		

Annex 3: Household Socio-Economic and Infrastructure Assessment Description

ACTIVITY DESCRIPTION

Household Socio-Economic and Infrastructure Assessment in Pemba and Quelimane for the Coastal City Adaptation Project

Project Overview

The USAID Coastal City Adaptation Project (CCAP) is a five-year project with the overall goal of increasing climate resilience in selected Mozambican coastal cities. A wide array of evidence persuasively demonstrates that proactive investments in adaptation can cost-effectively avert significant portion of the projected costs of climate change while yielding substantial co-benefits. To facilitate this process in vulnerable Mozambican coastal communities, CCAP has been working with municipal governments and local communities to increase understanding of urban adaptation issues and increase the application of management options for urban adaptation. CCAP has also been engaging with academia and an array of civic organizations to increase climate awareness and the technical expertise of future urban planners and municipal authorities to facilitate local adaptive measures. In this assignment CCAP will continue engaging with local universities and municipal entities to collect key climate change adaptation data to inform project intervention. The data will also be made available to local stakeholders (Municipality and university) to assist in prioritization of climate change interventions or university research projects in the context of smart city building.

Objectives

1. Improve the provision of climate-resilient urban services by municipalities;
2. Increase the adoption of climate resilience measures by communities, civic, and community organizations, including civil society, non-governmental, and faith-based organizations; and,
3. Increase the capacity to potentially implement economic risk-management tools, such as insurance plans and contingency funds, for at-risk urban infrastructure and livelihoods.

Project expected results:

1. Increased understanding of urban adaptation measures by municipal entities and increased absorptive capacity through application of adaptation-relevant management options;
2. Decreased vulnerability to climate change impacts of the population in the select coastal cities;
3. Increased, through environmental education initiatives, the local entities capacities to manage resources to adapt to climate change; and,
4. Synthesis and dissemination of lessons learned regarding urban coastal cities adaptation, which can be scaled up by other coastal cities and future USAID urban adaptation efforts.

Purpose of the Household Socio-Economic and Infrastructure Assessment

The CCAP Household Socio-Economic and Infrastructure Baseline Assessment intends to collect key data to establish a reference point for demographics; housing structure and conditions; income source and expenditures; assets ownership; environmental awareness and coping strategies; communication channels used; and current perceptions, attitudes,

knowledge, behaviors, and practices related to CCA, DRR, and sanitation at the individual, community, and city level for measuring the outcomes of the project's planned activities.

This assessment will only provide data and information for project objective 1 and 2.

Methodology for the Household Socio-Economic and Infrastructure Assessment

The proposed methodology will incorporate both quantitative and qualitative research methods and will produce data that is rigorous, representative and replicable. As mentioned above, the data collected will include key demographics; housing structure and conditions; income source and expenditures; assets ownership; environmental awareness and coping strategies; communication channels used; and current perceptions, attitudes, knowledge, behaviors, and practices related to CCA, DRR, and WASH at the individual, community, and city level. Data sources at a minimum will include a household survey, focus group discussions of community members representing the targeted neighborhoods, and observations recorded during the household visits. The survey will complement, harmonize, and strengthen existing local, regional, and national monitoring systems and other standard measures, such as Food Security and Nutrition Assessment conducted by SETSAN, Demographic and Health Survey conducted by INE.

The survey will use statistic methods and representative sample size that will be, therefore, essential to attain up to 95% level of confidence. CCAP will disaggregate the data by sex, age, education level, economic status, and geographical location. The Household Socio-Economic and Infrastructure Assessment will be carried out in all neighborhoods in Pemba and Quelimane and provide an overview of both cities according to the sample size designed. For more details about the sample design, please see *Metodologia do Desenho da Amostra*, found in appendix.

Cities	Total of Control Areas (CA)	Total of Enumeration Areas (EA)	Number of Households (HHs)	Total of population	Average of HH/EA	Sample segment	Household sample
Pemba	54	180	39,891	199,457	221.6	42	798
Quelimane	115	405	48,215	241,077	119	51	969
Total	169	513	88,107	440,534	171.7	93	1,767

CCAP will use in-depth assessment methodology to generate insights and have an overview of the current household and community profiles, including level of capacity and vulnerability to disaster and climate change impacts. For each distinct subgroups within the surveyed population, will seek to understand underlying causes of their vulnerability, their familiarity with CCA interventions and current practices to cope with the identified risks. Moreover, the collected data findings will help CCAP to tailor and target its intervention to address the identified underlying cause of climate vulnerabilities and contribute to improved city and respective resident's response capacities to deal with climate change impacts.

In partnership with the municipalities and local universities, CCAP will recruit, train, and deploy university students to collect data at household level. Municipal technicians (technical people delegated by the mayor based on their own expertise) will supervise these enumerators as they collect data through focus group discussion in the same areas. Those who will be part in this process will receive a basic training on climate change key terminology and definitions and also M&E training apart from data collection methodology that they will implement in the field as part of field work data collection training. The

supervisors will be responsible to review, clean and send the information in the end of each working day. For more details about the responsibilities for enumerators and supervisors, please see “Manual de Campo” in the appendix.

In collaboration with the municipalities, the household data collection tool will be converted to smartphone apps that will facilitate the data collection through phones and tablets. The data will be automatically incorporated in the SIGIU platform to be used by both municipalities and shared with partners as needed. All the process will be conducted in collaboration with municipality staff as on-the-job training (institutional capacity building process for M&E component).

Implementation

- a. Preparation
 - ✓ Develop a data collection tools in collaboration with CCAP technical team and Municipalities,
 - ✓ Hold internal discussion to identify the indicative measurements,
 - ✓ Translate the data collection tools into smartphones apps,
 - ✓ Schedule interviews with main data sources and other relevant stakeholders in the neighborhoods.
- b. Training and field data collection
 - ✓ Undertake recruitment and orientation of field staff (supervisors and interviewers) and pre-testing of data collection tools in collaboration with the CCAP municipal advisors and municipality designated,
 - ✓ Co-ordinate data collection
- c. Analysis and reporting
 - ✓ Data cleaning,
 - ✓ Analyze and interpret the findings, working closely with CCAP Municipal Advisors
 - ✓ Discuss findings with CCAP and Municipality technical team, and University students and make due recommendations,
 - ✓ Share draft baseline report with cities officials and relevant stakeholders

Chronogram

This activity will start in May 2016.

	# of days for training and deploying																						Report									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Training																																
Data collection																																
Field work report preparation																																
Data cleaning																																
Analyses																																
Report																																

Deliverables

1. Field data collection report.
2. Baseline, midline, and endline data for all CCAP relevant indicators in manageable system, such as SPSS, STATA and/or excel.
3. List of geographical coordinates of all households showing the households selected to be

control group.

4. Full draft Baseline Reports (which include, besides CCAP indicators history, demographic situation, livelihood, income source, access to land, Hazards) for CCAP team comments.
5. Final Baseline, Midline, and Endline Survey Report including qualitative and quantitative data collection tools in the annex.
6. Monitoring information to be included in monthly and quarterly CCAP reports.
7. Integration of the all data and reports into Pemba and Quelimane Platforms.

Annex 4: SBCC-related CCAP Indicator Table²¹

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
Project goal: Climate resilience in selected Mozambican coastal cities increased							
2. Number of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance (Outcome, GCC required indicator 4.8.2-26)* [GCC EG11.1-1 and GCC EG11.3-1]	Number of unique individuals who demonstrate increased capacity by either implementing risk-reducing practices/actions to improve resilience to climate change or who are using climate information in their decision-making	#	Project (or other implementing organization) records documenting type of activity, target audience, and evidence of increased capacity	a. Implementing risk-reducing practices/actions to improve resilience to climate change. [GCC EG11.3-1] b. Using climate information in their decision-making. [GCC EG11.1-1] c. With increased knowledge of climate change impacts and response options	Semi-annually	0	5,050
3. Number of laws, policies, strategies, plans, agreements, or regulations addressing climate change officially proposed, adopted, or implemented as a result of USG assistance (Outcome, F Indicator 4.8.2-28)* [GCC EG11.2-1 and GCC EG11.2-2]	Unique number of policies, laws, strategies, plans, agreements and regulations include those developed and formally endorsed by governmental, non-governmental, civil society, and/or private sector stakeholders to address climate change. However, if a measure is not yet adopted, it must at least be formally proposed within an official government process to be reported.	#	Project, government, or organization records documenting the measure, how it contributes to climate change, and stage of implementation	a. Number of laws, policies or regulations [GCC EG11.2-1] b. Number of plans or strategies [GCC EG11.2-2] c. Municipality d. Type of measure and stage (e.g. proposed, adopted, or implemented)	Annually	0	100

²¹ DQA indicators are designated with an asterisk in the “Indicator (Type)” column.

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
4. Number of institutions with improved capacity to assess/address climate change risks issues as a result of USG assistance (Outcome, F Indicator 4.8.2-14) [GCC EG11-3]	Institutions with improved capacity will be better able to govern, coordinate, analyze, advise, or make decisions related to adaptation or sustainable landscapes	#	Technical assistance reports completed by consultants or project staff providing technical assistance	Municipality and type of institutions	Annually	0	20
Objective 1: Improve the provision of climate-resilient urban services by municipalities							
5. Number of CCA or DRR tools, technologies and methodologies developed, tested and/or adopted as result of USG assistance (Outcome) [GCC EG11.1-3]	Number of unique tools (defined as procedures, protocols, approaches, practices, technologies, software applications, or systems based in science or analysis) that enhance climate change resiliency and are adopted by government authorities who work at the municipal level	#	Project records that describe the tools and provide evidence that they have been developed, tested, and/or adopted	Municipality; type of tool; stage of development (i.e. developed, tested, adopted)	Semi-annually	0	10
<i>IR 1.1 Municipal capacity to apply urban adaptation measures through science and analysis increased</i>							
7. Number of person hours of training completed in climate change as a result of USG assistance (Output, F Indicator 4.8.2-29)*	Formal training on CCA or DRR delivered through seminars or workshops to government authorities working at the municipal level in target cities. Training is defined as sessions in which participants are educated according to a defined curriculum and set learning objectives.	#	Project training records	Municipality; sex; training topic, government agency and non-government authority	Quarterly	0	9,000

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
<i>IR 1.2 Application of management, soft engineering, and hard engineering climate adaptation measures by municipal authorities through effective citizen engagement increased</i>							
9. Area (hectares) impacted by at least one CCA or DRR intervention implemented with citizen input per year (Outcome)	Number of hectares that have improved resiliency to climate change as a result of at least one CCA or DRR intervention per year. Citizen input refers to any mechanism by which government authorities engage or consult with communities potentially affected by the interventions.	Hectares	Municipal and project records that describe the interventions and provide evidence that they have been implemented. Area can be estimated from GIS maps of each city.	Municipality; type of intervention; lead organization; target area (city-wide or specific neighborhood)	Semi-annually	0	1,400
Objective 2: Increase adoption of climate resilience measures by communities, civic and community organizations including civil society, NGOs and faith-based organizations							
10. Number of people with increased knowledge of climate change impacts and adaptation strategies as a result of USG assistance (Outcome) [GCC EG11.3-2]	Number of individuals in target cities who demonstrate increased knowledge on climate change vulnerabilities and adaptive options as a result of pre- and post-intervention testing (e.g. through surveys, focus groups, written tests, etc.). Includes people participating in community activities (IR 2.1 and 2.2) and institutional capacity building and education initiatives (IR 2.3)	#	Project (or other implementing organization) records documenting type of activity, target audience, and evidence of increased knowledge	Municipality; sex; age group; source of information	Semi-annually	0	500

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
<i>IR 2.1 Citizen knowledge of local climate change vulnerabilities and adaptive options increased</i>							
11. Number of person-contact hours of information disseminated about climate change vulnerabilities and adaptive options (Output)	Number of impressions seen or heard by individuals in target cities of any content associated with a climate-smart cities branded public awareness or social and behavior change communication campaign.	#	Project (or other implementing organization) records documenting type of activity and target audience	Municipality; source of content (e.g., print, radio, TV, or new media, materials, etc.), source of information; communication topic; target area (city-wide or administrative post)	Quarterly	0	3,000,000
11a. Number of households reached by social and behavior change communication activities who have adopted climate-smart best practices and adaptation strategies. (Output)	Number of households reached that can demonstrate adoption of climate-smart best practices and adaptation strategies. Each household must be able to show how they have adopted climate-smart best practices in target cities. Includes people participating in community activities (IR 2.1 and 2.2) and institutional capacity building and education initiatives (IR 2.3)	#	Project (or other implementing organization) records documenting type of activity and target audience	Municipality; climate-smart best practices; adaptation strategies; target area (city-wide or administrative post)	Semi-annually	0	TBD
<i>IR 2.2 Community organizations' ability to implement a local set of risk mitigating measures improved</i>							
12. Proportion of CCA or DRR interventions implemented with community contributions (Outcome)	Total number of CCA or DRR interventions implemented in which local communities provide labor or materials for implementing or sustaining projects divided by the total number of CCA or DRR interventions implemented	%	Municipal and project records that describe community contributions to interventions	Municipality; type of intervention; lead organization; target area (city-wide or specific neighborhood)	Semi-annually	0	20%

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
<i>IR 2.4 Contributions of women, men, boys, and girls to CCA more equitable</i>							
13. Proportion of individuals engaged in CCAP activities who are youth (Output)	Number of girls and boys (age definition TBD) who participate in CCAP activities divided by the number of total participants in CCAP activities. Note: excludes technical assistance.	%	Project (or other implementing organization) records documenting type of activity and list of participants	Municipality; sex; type of activity	Semi-annually	0	20%

Annex 5: Additional SBCC-related CCAP Indicators

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
1. Number of homes constructed or adapted to be climate-smart based on city regulations and guidelines and the model housing infrastructures	A home that has been constructed or adapted to be climate-smart is defined as housing that is built using the techniques and following procedures that make the home resistant to extreme weather events (e.g., cyclones, floods, etc.) resistant, include structures to harvest and store rain water, and include a sanitation facility that is environment-friendly.	#	HH survey /Observation/Rapid Assessment	Municipality; neighborhood; constructed or adapted	Quarterly	0	100
2. Percentage of climate-smart homes or constructed or adapted that are used and maintained	Numerator: Number of heads of households or designated adults in the project zone of influence that answer the question: Are you using and maintaining your climate-smart house? Denominator: All households in the sample randomly selected in the project zone of influence.	%	HH survey/Rapid Assessment	Municipality; neighborhood; constructed or adapted	Quarterly	0	10%
3. Number of homes that are constructed or adapted with improved sanitation facility, ideally climate-smart (Outcome)	An improved sanitation facility that is constructed or adapted, ideally climate-smart, is defined as one that provide privacy, hygienically separates human excreta from human	#	HH survey	Municipality; neighborhood; constructed or adapted	Quarterly	0	200

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
	contact, is extreme event resistant and water efficient.						
4. Percentage of households using and maintaining an improved sanitation facility, ideally climate-smart (Outcome)	<p>Numerator: Number of heads of households or designated adults in the project zone of influence that answer the question: Are you using and maintaining a climate-smart latrines? How?</p> <p>Denominator: All households in the sample randomly selected in the project zone of influence.</p>	%	HH survey/Observation/Rapid Assessment	Municipality; neighborhood;	Quarterly	0	20%
5. Number of households that constructed rain water catchment systems that are secure and in a properly zoned location (Outcome)	A constructed rainwater catchment system is defined as a water-harvesting system that is resistant to extreme weather events.	#	HH survey/Observation/Rapid Assessment	Municipality; neighborhood; constructed or adapted	Quarterly	0	200
6. Percentage of households using and maintaining a constructed water catchment system that is secure and in a properly zoned location (Outcome)	<p>Numerator: Number of heads of households or designated adults in the project zone of influence that answer the question: Do you have any water catchment system in the house?</p> <p>Denominator: All households in the sample</p>	%	HH survey/Observation	Municipality; neighborhood; constructed or adapted	Quarterly	0	20%

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
	randomly selected in the project zone of influence.						
7. Percentage of households properly and safely disposing of solid waste generated at home	<p>Numerator: Number of heads of households or designated adults in the project zone of influence that answer the question: How do you dispose the solid waste generated at home?</p> <p>Denominator: All households in the sample randomly selected in the project zone of influence.</p>	%	HH survey	Municipality; neighborhood; constructed or adapted	Quarterly	0	30% from the Baseline
8. Percentage of households properly and safely disposing of trash generated outside of the home	<p>Numerator: Number of heads of households or designated adults in the project zone of influence that answer the question: How do you dispose the solid waste generated outside of the home?</p> <p>Denominator: All households in the sample randomly selected in the project zone of influence.</p>	%	HH survey	Municipality; neighborhood; constructed or adapted	Quarterly	0	30% from the Baseline
9. Percentage of population who can identify and define environmental protection areas.	<p>Numerator: Number of heads of households or designated adults in the project zone of influence that answer the question: Are there areas in the community where green</p>	%	HH Survey/Rapid assessment	Municipality; neighborhood; sex and age group	Quarterly	0	50% from baseline

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
	infrastructure are protected? Why? Denominator: All households in the sample randomly selected in the project zone of influence.						
10. Percentage of population no longer cutting mangroves for wood, construction, or charcoal.	Numerator: Number of heads of households or designated adults in the project zone of influence that answer the question: Do you cut mangroves for wood, construction, or charcoal? Denominator: All households in the sample randomly selected in the project zone of influence.	%	HH survey/Rapid assessment/Mangrove reports	Municipality; neighborhood; sex and age group	Quarterly	0	50% from the Baseline
11. Percentage of fishermen using ramps and paths at pre-defined areas so that their boats no longer hurt mangroves and other green infrastructure.	Numerator: Number of heads of households or designated adults in the project zone of influence that answer the question: Are there specific areas in the community where boats for fishing and passengers are docked? Denominator: All households in the sample randomly selected in the project zone of influence.	%	HH survey	Municipality; neighborhood; sex and age group	Quarterly	0	40% from the Baseline

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
12. Percentage of area covered by green infrastructure (Outcome)	Numerator: area covered by green infrastructure as result of CCAP intervention Denominator: All green area devastated and the remain green area	%	Mapping	Municipality; neighborhood	Semi-annually	0	20%
13. Percentage of households using mangroves and other green infrastructure for economic benefits like honey, crabs, and shrimp	Numerator: Number of households that are using mangroves or other green infrastructure for honey production, community food consumption contribution, production areas. Denominator: All households in the sample randomly selected in the project zone of influence.	%	HH Survey	Municipality; neighborhood	Quarterly	0	10% from the Baseline
14. Coping Strategies Index (CSI)	Coping strategies reflect the activities to which people resort to obtain food, income, and/or services when their normal means of livelihood have been disrupted. CSI reveals the severity of the strategies that households use to manage their lives after a shock or stream event such as floods, drought, cyclones, sea level rising, erosion. The determinants of the household coping capacities include physical assets, levels of production,	#	HH survey	Municipality; neighborhood	Annually	0	5 from the Baseline

Indicator (Type)	Description	Unit	Data Source	Disaggregation	Data collection frequency	Baseline	Goal
	income and consumption, and the ability to diversify sources of income and consumption in order to mitigate shocks. High score in CSI reflect the high vulnerability of the household and less resilience capacity.						
15. Assets ownership	<p>Assets ownership measures the increase in functioning assets that enable households to be more resilient, or less negatively impacted, by shocks. Such ‘resiliency-based assets’ would either be owned by the household, or shared with other smaller groups of households (e.g., neighbors) living within the community.</p> <p>Assets ownership (productive and non-productive) help to understand the household capacity to recover after an extreme event. This will help to measure the HH asset score.</p>	#	HH survey	Municipality; neighborhood	Annually	TBD	TBD

Annex 6: Key Climate-Smart Institutions and Their Roles

Institution	Role and responsibilities	Competencies
CCAP	<p>As lead in the implementation of the SBCC strategy:</p> <ul style="list-style-type: none"> • Facilitate the development and execution of a mass media plan based on the needs described in the SBCC strategy and further developed in additional formative research. • Procure relevant and quality material such as films, print material to develop a reference and resource section and appropriately disseminate it. • Establish and maintain an interactive website for CCA materials, strategies and methodologies. • Coordinate and collaborate with various support agencies, media, and other stakeholders. • Develop suitable capacity building modules for TOT. • Conducting additional formative research for designing SBCC initiatives. • Prepare and maintain audience profiles based on the results of research and evaluations. • Define the SBCC objectives and indicators based on research and in consultation with the partner institutions. • Undertake pre-testing of message and materials in their regions and among the various population groups. • Make an inventory of CCA and DRR promotion strategies/activities at the national, provincial, and local levels. • Maintain necessary databases. • Organize and implement the capacity building, research and evaluation functions. • Design pre and post evaluations. 	<ul style="list-style-type: none"> • All aspects of BCC including planning and management, TOTs, message and material development, relevant research • Plan, conduct, and use formative communication and social research (including baseline and end line evaluations). • Message design, pretest, and material development • Working with designers, creative artists, preparing terms of reference • Building linkages, advocacy, and mentoring • M&E • Reporting and documentation
Technical Support Partners: MITADER, INGC, Academia, Provincial Directorate of Public Works and Water Resources, etc.	<ul style="list-style-type: none"> • Identify climate change priorities as well as help with audience profiling leading onto the development of media mix. • Support the development of indicators and critical messages for different population groups and climate change risks (covered under national programs and others). • Conduct research and impact evaluations. • Provide handholding support to target municipalities. 	<ul style="list-style-type: none"> • SBCC and social/community mobilization • Technical proficiency in specific areas like CCA, DRR, sanitation, gender, qualitative research, etc.

Institution	Role and responsibilities	Competencies
Development Partners, NGOs, CBOs, and allied Institutions (e.g., CVM/Red Cross, etc.)	<ul style="list-style-type: none"> • Include developed modules on CCA and DRR in their training programs. • Program implementation for defined audience segments. 	<ul style="list-style-type: none"> • SBCC and technical proficiency in specific areas
Municipalities	<ul style="list-style-type: none"> • Supporting additional formative research activities for designing city-specific SBCC initiatives. • Adapt SBCC strategy for municipalities based on program indicators through a task force constituted for this purpose. • Collaborate in adapting and designing context specific messages and materials. • Mobilize civil society resources available within the municipal areas. 	<ul style="list-style-type: none"> • Program planning and implementation • Support additional formative research • Selecting media and provider mix • Collaborate in programming and adapting and designing material in locally suitable formats • Organize events

Annex 7: SBCC Strategy Chart

Intervention		Types of activities
1. Enabling Environment (Policies, advocacy, institutional development and financing)	Institutional development and capacity building	<ul style="list-style-type: none"> Threshold program, skills in: urban and climate adaptation planning, governance, sanitation management and enforcement, green infrastructure protection, CCA and DRR, conflict resolution, etc.
	Policy and advocacy	<ul style="list-style-type: none"> National, provincial, and local government participation in climate resilient programs and decision-making, review urban policy, etc.
	Financing	<ul style="list-style-type: none"> Adequate budget at municipal/metro level, resourcing NGOs, micro credit for climate-smart home, latrine, and water catchment system construction
	Private sector participation	<ul style="list-style-type: none"> PPP for climate-smart household construction, sanitation management, etc.
2. Communication approaches to promote climate-smart behaviors and practices	Communication	<ul style="list-style-type: none"> Radio and TV spots, posters, dramas/skits, songs, fliers, flipcharts, group discussions, stories, theatre, songs, testimonials - experiences of early adopters, educational games, drama/skit scripts, banners, memory aids/danglers, point-of-purchase advertising.
	Training	<ul style="list-style-type: none"> Create cadre of climate adaptation promoters. Train media, teachers, promoters, etc. on climate adaptation., including how to conduct a community group meeting; negotiation skills; how to effectively communicate with children; etc.
	Social Mobilization	<ul style="list-style-type: none"> Support of associations, CCA/DRR, natural resources, and environment groups, etc., champion community contests, community/household contests for climate-smart household, climate resilient management committees, school fairs, community micro-finance groups to sell services supporting climate adaptation, school science and craft projects, and community fairs, etc. Village walks, PRAs
	Social Marketing	<ul style="list-style-type: none"> Climate-smart demonstration centers with sample homes, latrines, and water catchment systems. Create cadre of outreach sellers.
3. Access to infrastructure, services, and systems	Services	<ul style="list-style-type: none"> Trash collection/solid waste management Green infrastructure growth and maintenance
	Systems	<ul style="list-style-type: none"> Implementation of SIGIU and SIGIC 3-2-1 service